



STIC Search Report

EIC 1700

STIC Database Tracking Number: 189299

**TO: John Chu
Location: REM 9D51
Art Unit : 1752
February 28, 2006**

Case Serial Number: 10/849186

**From: Usha Shrestha
Location: EIC 1700
REMSEN 4B28
Phone: 571/272-3519
usha.shrestha@uspto.gov**

Search Notes



STIC Search Results Feedback Form

EIC17000

Questions about the scope or the results of the search? Contact *the EIC searcher* or contact:

Kathleen Fuller, EIC 1700 Team Leader
571/272-2505 REMSEN 4B28

Voluntary Results Feedback Form

- I am an examiner in Workgroup: Example: 1713
- Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature
(journal articles, conference proceedings, new product announcements etc.)

- Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

=> fil reg

FILE 'REGISTRY' ENTERED AT 09:54:43 ON 28 FEB 2006

=> d his

FILE 'REGISTRY' ENTERED AT 09:42:17 ON 28 FEB 2006

ACT CHU186A/A

L1 STR
L2 442695 SEA FILE=REGISTRY SSS FUL L1

ACT CHU186/A

L3 STR
L4 STR
L5 (442695) SEA FILE=REGISTRY SSS FUL L3
L6 2290 SEA FILE=REGISTRY SUB=L5 SSS FUL L4

ACT CHU197/A

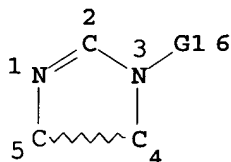
L7 STR
L8 STR
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L10 8549 SEA FILE=REGISTRY SUB=L9 SSS FUL L8

FILE 'HCAPLUS' ENTERED AT 09:46:55 ON 28 FEB 2006

L11 1 S US20040234884/PN
L12 1 S US20050008968/PN
L13 924 S L6
L14 1426 S L10
L15 35 S L13 AND ?RESIST?
L16 52 S L14 AND ?RESIST?
SEL L16 HIT RN 1-52
L17 21 S L16 AND PHOTOG?/SC,SX
L18 10 S L15 AND PHOTOG?/SC,SX
L19 25 S L15 NOT L18
L20 23 S L13 AND PHOTOG?/SC,SX
L21 23 S L18 OR L20
L22 1 S L21 AND L11
L23 48 S L14 AND PHOTOG?/SC,SX
L24 48 S L17 OR L23
L25 1 S L24 AND L12

=> d que 121

L3 STR



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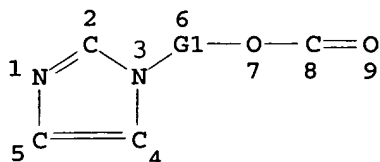
NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
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NUMBER OF NODES IS 6

STEREO ATTRIBUTES: NONE
L4 STR



VAR G1=AK/CB
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RING(S) ARE ISOLATED OR EMBEDDED
NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE
L5 (442695)SEA FILE=REGISTRY SSS FUL L3
L6 2290 SEA FILE=REGISTRY SUB=L5 SSS FUL L4
L13 924 SEA FILE=HCAPLUS ABB=ON PLU=ON L6
L15 35 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND ?RESIST?
L18 10 SEA FILE=HCAPLUS ABB=ON PLU=ON L15 AND PHOTOG?/SC,SX

L20 23 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND PHOTOG?/SC,SX
L21 23 SEA FILE=HCAPLUS ABB=ON PLU=ON L18 OR L20

=> fil hcap
FILE 'HCAPLUS' ENTERED AT 09:54:57 ON 28 FEB 2006

=> d l21 1-23 ibib abs hitstr hitind

L21 ANSWER 1 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1155389 HCAPLUS
DOCUMENT NUMBER: 143:413518
TITLE: Nitrogen-containing organic compound,
chemically amplified **resist**
composition and patterning process
INVENTOR(S): Watanabe, Takeru; Hasegawa, Koji; Takemura,
Katsuya; Noda, Kazumi
PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan
SOURCE: U.S. Pat. Appl. Publ., 23 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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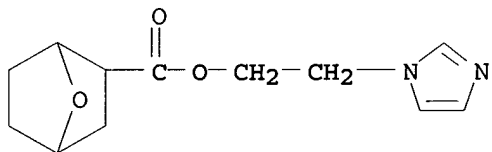
 US 2005238993 A1 20051027 US 2005-110927 2005
 0421
 JP 2005306812 A2 20051104 JP 2004-128478 2004
 0423
 PRIORITY APPLN. INFO.: JP 2004-128478 A 2004
 0423

AB Chemical amplified **photoresist** compns. comprising
 nitrogen-containing organic compds. having a 7-oxanorbornane-2-carboxylic
 ester structure have an excellent resolution and provide a precise
 pattern profile and are useful in microfabrication using electron
 beams or deep-UV light.

IT **867257-55-4P**
 (nitrogen-containing organic compound for chemical amplified **resist**
 composition)

RN 867257-55-4 HCAPLUS

CN 7-Oxabicyclo[2.2.1]heptane-2-carboxylic acid, 2-(1H-imidazol-1-
 yl)ethyl ester (9CI) (CA INDEX NAME)



IC ICM G03C001-492

INCL 430270100

CC 74-5 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST nitrogen org compd chem amplified **photoresist** compn
 patterning process

IT Photolithography

Photoresists

(nitrogen-containing organic compound for chemical amplified **resist**
 composition and patterning process)

IT 867257-46-3P 867257-47-4P 867257-49-6P 867257-51-0P
 867257-52-1P 867257-54-3P

(nitrogen-containing organic compound for chemical amplified **resist**
 composition)

IT 111-95-5P 867257-45-2P 867257-48-5P 867257-50-9P
 867257-53-2P **867257-55-4P** 867257-56-5P 867257-57-6P
 867257-59-8P

(nitrogen-containing organic compound for chemical amplified **resist**
 composition)

IT 102-71-6, Triethanolamine, reactions 102-79-4,
 Butyldiethanolamine 105-59-9, Methyl-diethanolamine 109-85-3,
 2-Methoxyethylamine 120-07-0, Phenyl-diethanolamine 122-20-3,
 Triisopropanolamine 122-96-3, 1,4-(Bis(2-hydroxyethyl)piperazine
 622-40-2, 2-Morpholinoethanol 1615-14-1, 1H-Imidazole-1-ethanol
 3040-44-6, 2-Piperidinoethanol 3445-11-2, 2-(2-Oxo-1-
 pyrrolidinyl)ethanol 6340-03-0, 1H-Benzimidazole-1-ethanol
 17209-72-2 21987-32-6 64897-90-1 867257-43-0
 (preparation of nitrogen-containing organic compound for chemical amplified

resist composition)
IT 79402-97-4P
(proparation of nitrogen-containing organic compound for chemical amplified
resist composition)
IT 867257-44-1P
(proparation of nitrogen-containing organic compound for chemical amplified
resist composition)

L21 ANSWER 2 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1023521 HCAPLUS
DOCUMENT NUMBER: 143:336181
TITLE: Cellulose acylate films useful for
photographic and display applications and
image display devices using them
INVENTOR(S): Kato, Eiichi
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 68 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

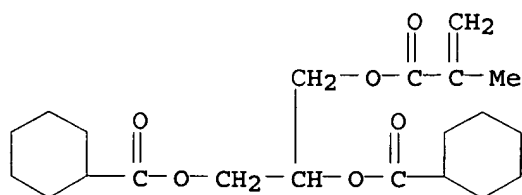
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 2005255832	A2	20050922	JP 2004-68835	2004 0311
PRIORITY APPLN. INFO.:			JP 2004-68835	2004 0311

AB The films with good balance of brittle **resistance** and
hardness, are made from a composition containing cellulose acylate and
≥1 water-insol. block copolymer having a polymerized portion
derived from radical-polymerizable hydrophobic monomer(s) and a
polymerized portion derived from radical-polymerizable hydrophilic
monomer(s).

IT 865104-00-3P
(assumed monomers; cellulose acylate films useful for photog.
and display applications and image display devices using them)
RN 865104-00-3 HCAPLUS
CN Cyclohexanecarboxylic acid, 1-[[[(2-methyl-1-oxo-2-
propenyl)oxy]methyl]-1,2-ethanediyl ester, polymer with cyclohexyl
2-propenoate, 2-hydroxyethyl 2-methyl-2-propenoate,
2-(1H-imidazol-1-yl)ethyl 2-methyl-2-propenoate and
2-(phosphonooxy)ethyl 2-methyl-2-propenoate, block, graft (9CI)
(CA INDEX NAME)

CM 1

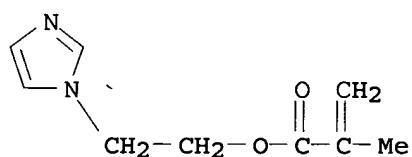
CRN 865103-99-7
CMF C21 H32 O6



CM 2

CRN 62037-81-4

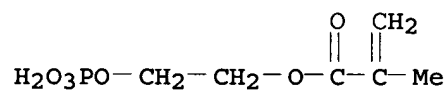
CMF C9 H12 N2 O2



CM 3

CRN 24599-21-1

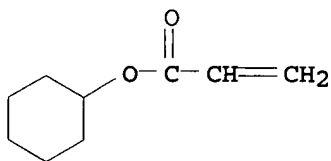
CMF C6 H11 O6 P



CM 4

CRN 3066-71-5

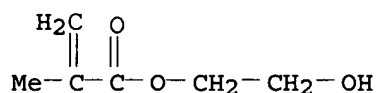
CMF C9 H14 O2



CM 5

CRN 868-77-9

CMF C6 H10 O3



IC ICM C08L001-12
 ICS B29C041-24; C08J005-18; G02B005-30; B29K001-00; B29L007-00
 CC 74-2 (Radiation Chemistry, Photochemistry, and
 Photographic and Other Reprographic Processes)
 IT 865103-96-4P 865103-98-6P **865104-00-3P**
 (assumed monomers; cellulose acylate films useful for photog.
 and display applications and image display devices using them)

L21 ANSWER 3 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:429276 HCAPLUS

DOCUMENT NUMBER: 142:490393

TITLE: Nitrogen-containing organic compound,
 resist composition and patterning
 process

INVENTOR(S): Watanabe, Takeru; Kinsho, Takeshi; Hasegawa,
 Koji; Takemura, Katsuya; Noda, Kazumi;
 Kobayashi, Katsuhiko

PATENT ASSIGNEE(S): Shin-Etsu Chemical Co., Ltd., Japan

SOURCE: U.S. Pat. Appl. Publ., 31 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

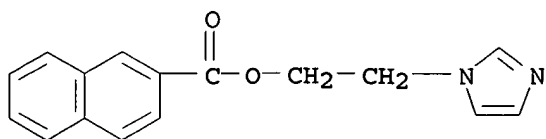
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2005106500	A1	20050519	US 2004-984933	2004 1110
JP 2005165295	A2	20050623	JP 2004-324619	2004 1109
PRIORITY APPLN. INFO.:			JP 2003-384505	A 2003 1114

AB Chemical amplified **resist** compns. comprising
 nitrogen-containing organic compds. having an aromatic carboxylic acid ester
 structure have an excellent resolution and provide a precise pattern
 profile and are useful in microfabrication using electron beams or
 deep-UV light.

IT **851706-04-2P**
 (nitrogen-containing organic compound, **resist** composition and
 patterning process)

RN 851706-04-2 HCAPLUS

CN 2-Naphthalenecarboxylic acid, 2-(1H-imidazol-1-yl)ethyl ester
 (9CI) (CA INDEX NAME)



IC ICM G03C001-492

INCL 430270100

CC 74-5 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

ST nitrogen org photoresist compn process

IT Photolithography

Photoresists(nitrogen-containing organic compound, resist composition and
patterning process)

IT 51-17-2, Benzimidazole 98-88-4, Benzoyl chloride 100-07-2,
4-Methoxybenzoyl chloride 102-71-6, Triethanolamine, reactions
527-69-5, 2-Furoyl chloride 622-40-2, 2-Morpholinoethanol
879-18-5, 1-Naphthoyl chloride 1615-14-1, 2-(Imidazol-1-
yl)ethanol 2243-83-6, 2-Naphthoyl chloride 2955-88-6,
2-(1-Pyrrolidinyl)ethanol 5452-06-2, 2-Chloroethyl
4-methoxybenzoate 6425-32-7, 3-Morpholinopropane-1,2-diol
14002-51-8, 4-Phenylbenzoyl chloride 17209-72-2 17213-57-9,
3,5-Dimethoxybenzoyl chloride 33941-15-0, 1-Aza-18-crown-6
79402-97-4 98998-43-7

(nitrogen-containing organic compound, resist composition and
patterning process)

IT 22495-17-6P, 2-(1H-Benzimidazol-1-yl)ethyl benzoate 47750-79-8P
79690-87-2P 192817-77-9P, Ethyl 2-(1-pyrrolidinyl)benzoate
497057-34-8P 851705-95-8P 851705-97-0P 851705-99-2P
851706-00-8P 851706-01-9P 851706-02-0P 851706-03-1P
851706-04-2P 851706-05-3P 851706-06-4P 851706-07-5P

(nitrogen-containing organic compound, resist composition and
patterning process)

L21 ANSWER 4 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:1019601 HCAPLUS

DOCUMENT NUMBER: 142:13680

TITLE: Basic compound, resist composition
and patterning processINVENTOR(S): Watanabe, Takeru; Kinsho, Takeshi; Hasegawa,
Koji

PATENT ASSIGNEE(S): Japan

SOURCE: U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2004234884	A1	20041125	US 2004-849186	2004 0520
JP 2004347736	A2	20041209	JP 2003-142813	2003

PRIORITY APPLN. INFO.:

JP 2003-142813

A

0521

2003

0521

OTHER SOURCE(S): MARPAT 142:13680

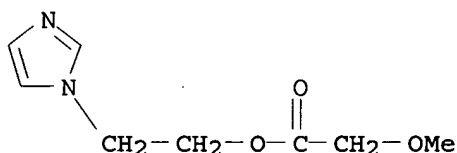
AB Resist compns. comprising basic compds. having an imidazole skeleton and a polar functional group have an excellent resolution and an excellent focus margin and are useful in microfabrication using electron beams or deep-UV light.

IT 798571-49-0P 798571-50-3P

(basic compound; resist composition and patterning process)

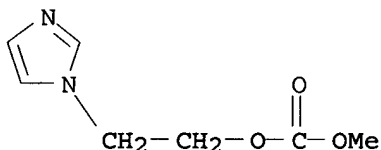
RN 798571-49-0 HCAPLUS

CN Acetic acid, methoxy-, 2-(1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)



RN 798571-50-3 HCAPLUS

CN Carbonic acid, 2-(1H-imidazol-1-yl)ethyl methyl ester (9CI) (CA INDEX NAME)

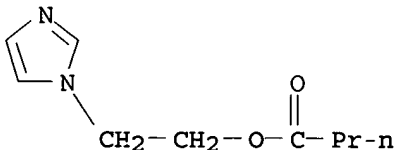


IT 95360-46-6 95360-61-5 798571-59-2
798571-60-5 798571-61-6 798571-62-7
798571-63-8 798571-64-9 798571-65-0
798571-66-1 798571-67-2 798571-68-3
798571-69-4 798571-73-0

(basic compound; resist composition and patterning process)

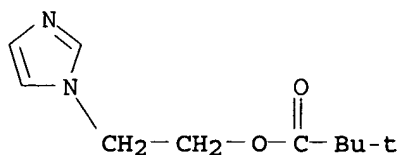
RN 95360-46-6 HCAPLUS

CN Butanoic acid, 2-(1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)

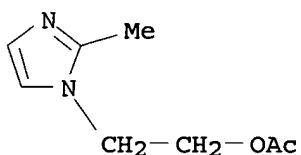


RN 95360-61-5 HCAPLUS

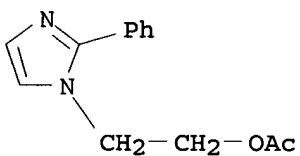
CN Propanoic acid, 2,2-dimethyl-, 2-(1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)



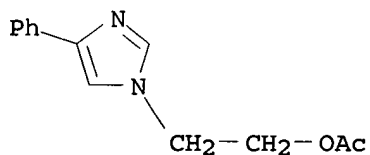
RN 798571-59-2 HCAPLUS
CN 1H-Imidazole-1-ethanol, 2-methyl-, acetate (ester) (9CI) (CA
INDEX NAME)



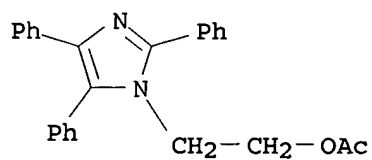
RN 798571-60-5 HCAPLUS
CN 1H-Imidazole-1-ethanol, 2-phenyl-, acetate (ester) (9CI) (CA
INDEX NAME)



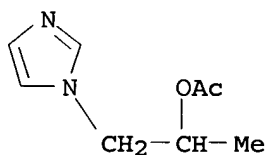
RN 798571-61-6 HCAPLUS
CN 1H-Imidazole-1-ethanol, 4-phenyl-, acetate (ester) (9CI) (CA
INDEX NAME)



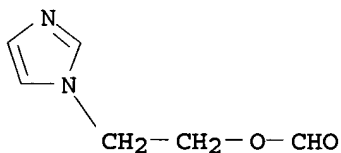
RN 798571-62-7 HCAPLUS
CN 1H-Imidazole-1-ethanol, 2,4,5-triphenyl-, acetate (ester) (9CI)
(CA INDEX NAME)



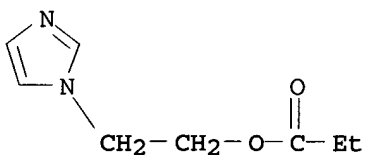
RN 798571-63-8 HCAPLUS
 CN 1H-Imidazole-1-ethanol, α -methyl-, acetate (ester) (9CI)
 (CA INDEX NAME)



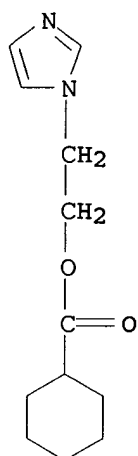
RN 798571-64-9 HCAPLUS
 CN 1H-Imidazole-1-ethanol, formate (ester) (9CI) (CA INDEX NAME)



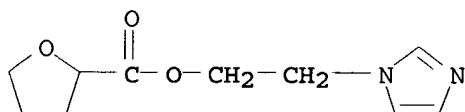
RN 798571-65-0 HCAPLUS
 CN 1H-Imidazole-1-ethanol, propanoate (ester) (9CI) (CA INDEX NAME)



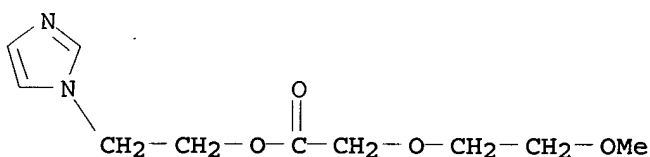
RN 798571-66-1 HCAPLUS
 CN Cyclohexanecarboxylic acid, 2-(1H-imidazol-1-yl)ethyl ester (9CI)
 (CA INDEX NAME)



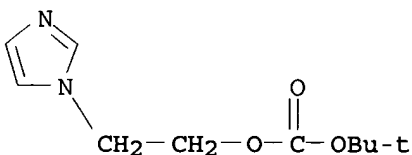
RN 798571-67-2 HCAPLUS
 CN 2-Furancarboxylic acid, tetrahydro-, 2-(1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)



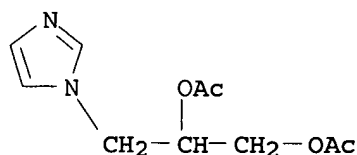
RN 798571-68-3 HCAPLUS
 CN Acetic acid, (2-methoxyethoxy)-, 2-(1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)



RN 798571-69-4 HCAPLUS
 CN Carbonic acid, 1,1-dimethylethyl 2-(1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)



RN 798571-73-0 HCAPLUS
 CN 1,2-Propanediol, 3-(1H-imidazol-1-yl)-, diacetate (ester) (9CI) (CA INDEX NAME)



IC ICM G03C001-76
 INCL 430141000; 430270100
 CC 74-5 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
 ST basic compd **resist** compn patterning UV electron beam
 lithog
 IT 1615-14-1P, 1H-Imidazole-1-ethanol 34793-28-7P 51755-51-2P
 72338-57-9P 72338-63-7P, 1H-Imidazole-1-butanenitrile
 72459-38-2P 195304-84-8P **798571-49-0P**
798571-50-3P 798571-51-4P
 (basic compound; **resist** composition and patterning process)
 IT 3001-72-7, 1,5-Diazabicyclo[4.3.0]-5-nonene 6674-22-2,
 1,8-Diazabicyclo[5.4.0]-7-undecene 20734-58-1,
 1,8-Bis(dimethylamino)naphthalene **95360-46-6**
95360-61-5 148458-64-4 263389-34-0 798571-52-5
 798571-53-6 798571-54-7 798571-55-8 798571-56-9
 798571-57-0 798571-58-1 **798571-59-2**
798571-60-5 **798571-61-6** **798571-62-7**
798571-63-8 **798571-64-9** **798571-65-0**
798571-66-1 **798571-67-2** **798571-68-3**
798571-69-4 798571-71-8 798571-72-9
798571-73-0 798571-74-1
 (basic compound; **resist** composition and patterning process)
 IT 70587-55-2
 (crosslinker; **resist** composition and patterning process)
 IT 138529-81-4 142342-33-4 144317-44-2 161453-44-7
 266308-64-9
 (photoacid generator; **resist** composition and patterning
 process)
 IT 24979-74-6 123589-22-0 129674-22-2 158593-28-3 279243-86-6
 326925-70-6 443796-30-3 645393-08-4 798570-36-2
 798570-38-4 798570-39-5 798570-41-9 798570-42-0
 (resin; **resist** composition and patterning process)
 IT 351181-99-2P
 (**resist** composition and patterning process)
 IT 117458-06-7
 (**resist** composition and patterning process)

L21 ANSWER 5 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2004:842278 HCAPLUS
 DOCUMENT NUMBER: 141:351533
 TITLE: Magenta azo pigments for ink-jet inks
 INVENTOR(S): Suzuki, Rihoko; Sugimoto, Kenichi; Matsuzaki,
 Yoriaki; Okuma, Tadashi; Oi, Ryu
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 32 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	---	-----	-----	
JP 2004285241	A2	20041014	JP 2003-79982	2003 0324
PRIORITY APPLN. INFO.:			JP 2003-79982	2003 0324
OTHER SOURCE(S):			MARPAT 141:351533	
GI				

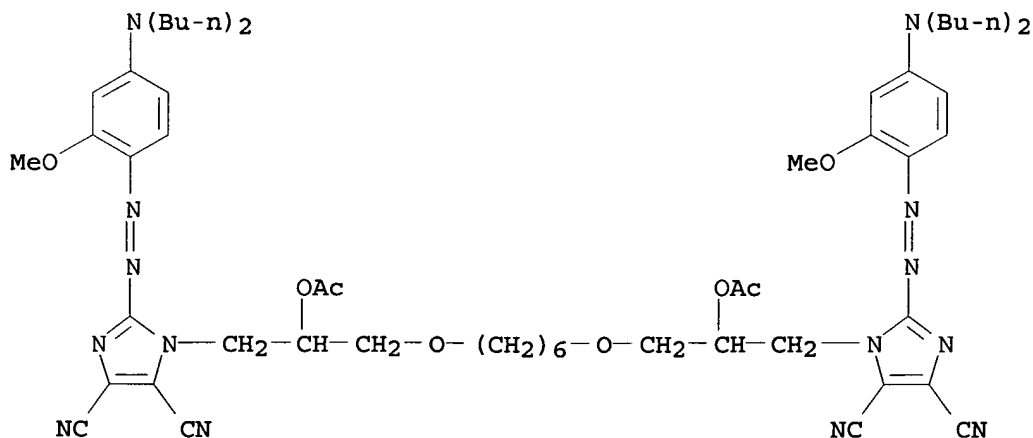
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
*

AB Azo pigments I [A = O-containing linking group; R1, R2 = H, halo, (un)substituted alkyl or alkoxy, NHSO2Q1, NHCOQ2; Q1, Q2 = H, (un)substituted alkyl, alkoxy, aryl or aryloxy; R3, R4 = H, (un)substituted alkyl, aryl or alkenyl, where R3 and R4 may link with each other or with the adjacent aromatic ring to form a ring; n = 2, 3] having good solubility in organic solvents are prepared and used in ink-jet ink formulations. Thus, a magenta jet printing ink containing II 5, diethylene glycol monobutyl ether 10, and PhMe 85 parts showed no precipitation after 1-mo storage at 40° and gave images with high optical d. after water immersion or after 100-h accelerated weathering test.

IT 774224-72-5 774224-80-5
(magenta azo pigments for ink-jet inks with good storage stability and water and weather **resistance**)

RN 774224-72-5 HCAPLUS

CN 1H-Imidazole-4,5-dicarbonitrile, 1,1'-[1,6-hexanediylbis[oxy[2-(acetyloxy)-3,1-propanediyl]]]bis[2-[[4-(dibutylamino)-2-methoxyphenyl]azo]- (9CI) (CA INDEX NAME)

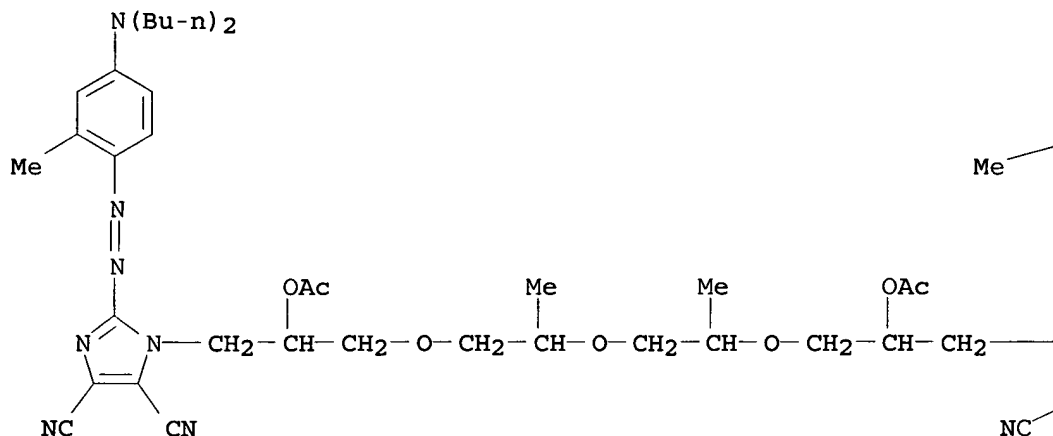


RN 774224-80-5 HCAPLUS

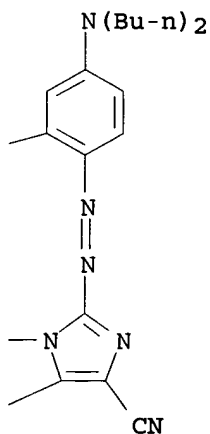
CN 1H-Imidazole-4,5-dicarbonitrile, 1,1'-[(1-methyl-1,2-ethanediyl)bis[oxy[2-(acetyloxy)-3,1-propanediyl]]]bis[2-[[4-

(dibutylamino)-2-methylphenyl]azo]- (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B



IC ICM C09B035-025
 ICS B41J002-01; B41M005-00; C07D233-90; C09B035-34; C09B043-00;
 C09D011-00
 CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 41
 ST water weather **resistance** jet printing ink azo magenta
 pigment; storage stability jet printing ink magenta azo pigment
 IT Inks
 (jet-printing, solvent-based; magenta azo pigments for ink-jet
 inks with good storage stability and water and weather
resistance)
 IT Inks
 (jet-printing, water-thinned; magenta azo pigments for ink-jet
 inks with good storage stability and water and weather
resistance)
 IT 774224-69-0P 774224-70-3P

(magenta azo pigments for ink-jet inks with good storage stability and water and weather resistance)

IT 774224-71-4 774224-72-5 774224-73-6 774224-74-7
774224-75-8 774224-76-9 774224-77-0 774224-78-1
774224-79-2 774224-80-5 774224-81-6

(magenta azo pigments for ink-jet inks with good storage stability and water and weather resistance)

L21 ANSWER 6 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:798647 HCAPLUS

DOCUMENT NUMBER: 141:315977

TITLE: Magzenta azo pigments for ink-jet inks

INVENTOR(S): Suzuki, Rihoko; Okuma, Tadashi; Sugimoto, Kenichi; Oi, Ryu; Matsuzaki, Yoriaki

PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 27 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004269619	A2	20040930	JP 2003-60125	2003 0306

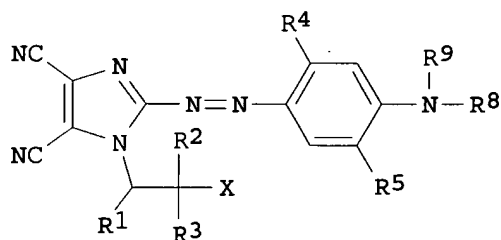
PRIORITY APPLN. INFO.:

JP 2003-60125

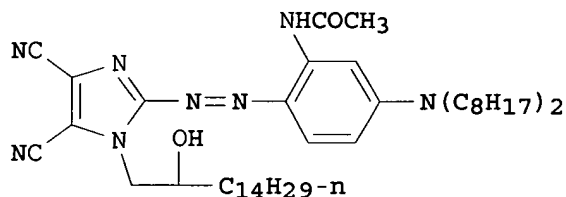
2003
0306

OTHER SOURCE(S): MARPAT 141:315977

GI



I



II

AB Azo pigments I [R1-R3 = H, (un)substituted alkyl, aryl or alkenyl, where R1 and R3 may link together to form a ring; R4, R5 = H, halo, (un)substituted alkyl or alkoxy, etc.; R8, R9 = H, (un)substituted alkyl or aryl, where R8 and R9 may link with each

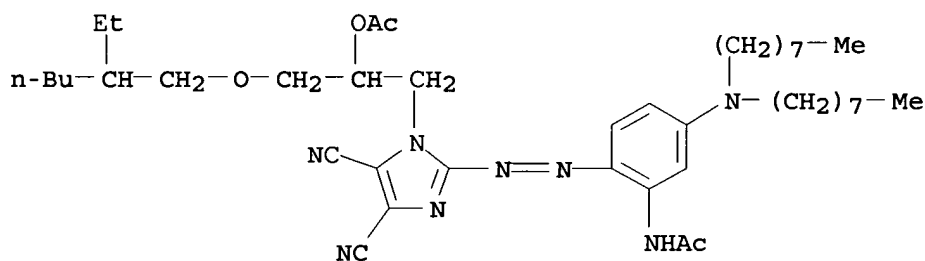
other or with the adjacent aromatic ring to form a ring; X = OH, (un)substituted alkoxy or aryloxy, etc.] having good solubility in organic solvents are prepared and used in ink-jet ink formulations. Thus, a magenta jet printing ink containing II 5, diethylene glycol monobutyl ether 10, and PhMe 85 parts showed no precipitation after 1-mo storage at 40° and gave images with high optical d. after water immersion or after 100-h accelerated weathering test.

IT 766537-05-7P

(magenta azo pigments for ink-jet inks with good storage stability and water and weather **resistance**)

RN 766537-05-7 HCAPLUS

CN Acetamide, N-[2-[[1-[2-(acetyloxy)-3-[(2-ethylhexyl)oxy]propyl]-4,5-dicyano-1H-imidazol-2-yl]azo]-5-(dioctylamino)phenyl]- (9CI)
(CA INDEX NAME)

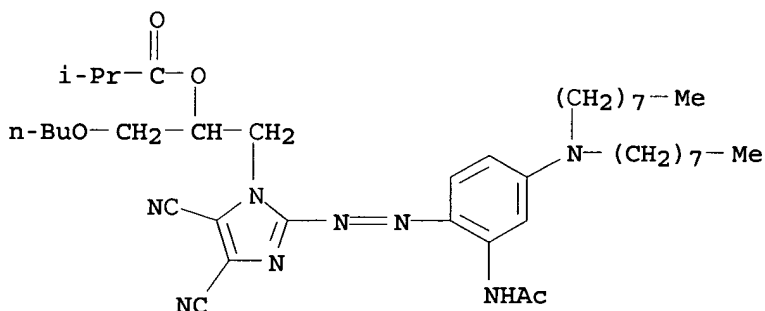


IT 766537-12-6 766537-14-8

(magenta azo pigments for ink-jet inks with good storage stability and water and weather **resistance**)

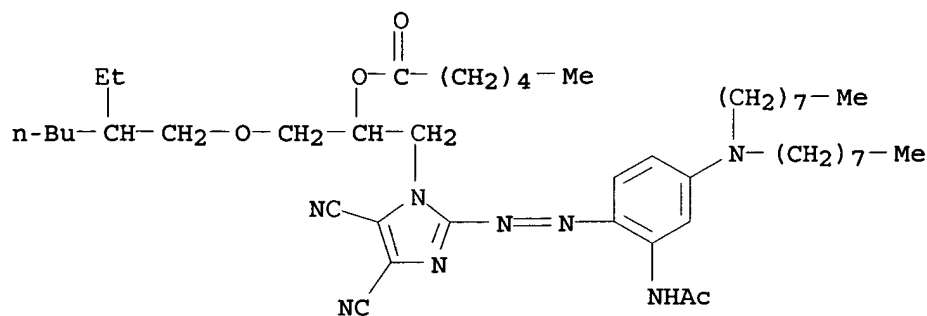
RN 766537-12-6 HCAPLUS

CN Propanoic acid, 2-methyl-, 2-[2-[[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]-1-(butoxymethyl)ethyl ester (9CI) (CA INDEX NAME)



RN 766537-14-8 HCAPLUS

CN Hexanoic acid, 2-[2-[[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]-1-[[2-(ethylhexyl)oxy]methyl]ethyl ester (9CI) (CA INDEX NAME)



IC ICM C09B029-09
 ICS B41J002-01; B41M005-00; C09B043-00; C09D011-00
 CC 42-12 (Coatings, Inks, and Related Products)
 Section cross-reference(s): 41
 ST water weather **resistance** jet printing ink azo magenta
 pigment; storage stability jet printing ink magenta azo pigment
 IT Pigments, nonbiological
 (azo; magenta azo pigments for ink-jet inks with good storage
 stability and water and weather **resistance**)
 IT Inks
 (jet-printing, solvent-based; magenta azo pigments for ink-jet
 inks with good storage stability and water and weather
resistance)
 IT Inks
 (jet-printing, water-thinned; magenta azo pigments for ink-jet
 inks with good storage stability and water and weather
resistance)
 IT 766537-04-6P
 (magenta azo pigments for ink-jet inks with good storage
 stability and water and weather **resistance**)
 IT 766537-03-5P 766537-05-7P
 (magenta azo pigments for ink-jet inks with good storage
 stability and water and weather **resistance**)
 IT 766537-06-8 766537-07-9 766537-08-0 766537-09-1
 766537-10-4 766537-11-5 766537-12-6 766537-13-7
 766537-14-8 767332-43-4
 (magenta azo pigments for ink-jet inks with good storage
 stability and water and weather **resistance**)

L21 ANSWER 7 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 2002:268665 HCAPLUS
 DOCUMENT NUMBER: 136:311211
 TITLE: Azo dyes and their use as magenta colorants
 for color toners
 INVENTOR(S): Matsuzaki, Yoriaki; Kogo, Osamu
 PATENT ASSIGNEE(S): Mitsui Chemicals Inc., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----

JP 2002105347

A2

20020410

JP 2000-293971

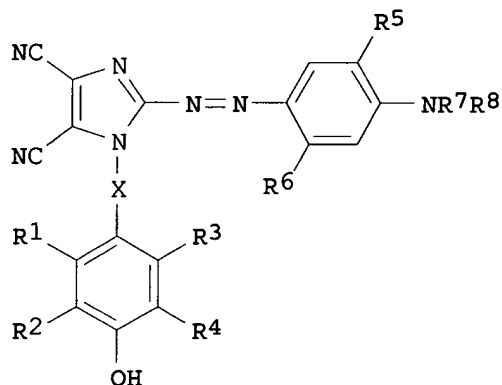
2000
0927

PRIORITY APPLN. INFO.:

JP 2000-293971

2000
0927OTHER SOURCE(S):
GI

MARPAT 136:311211



I

AB The dyes are of I-type compds. (R1-4 = H, alkyl, 2H-benzotriazol-2-yl; R5, R6 = H, halogen, alkyl, alkoxy, aryl, carboxylate ester, carbonylamide, sulfamide, aminocarbonyl groups; R7, R8 = H, alkyl, aryl, alkenyl; R7 and R8 together can form a ring; X = linking groups). Thus, coupling a diazotized 2-aminoimidazole-4,5-dicarbonitrile with N-acetyl-N',N'-dioctyl-1,3-diaminobenzene gave an intermediate which (7.5 parts) was combined with N,N-dimethylimidazolidinone 38, K carbonate 3 and KBr 0.4, heated to 80°, mixed with 3,5-di-tert-butyl-4-hydroxybenzyl alc. monochloroacetate 6.8 parts for 1 h and working up gave a dye with λ_{\max} 522 nm and gram absorption coefficient 66400 mL/g·cm for toner use.

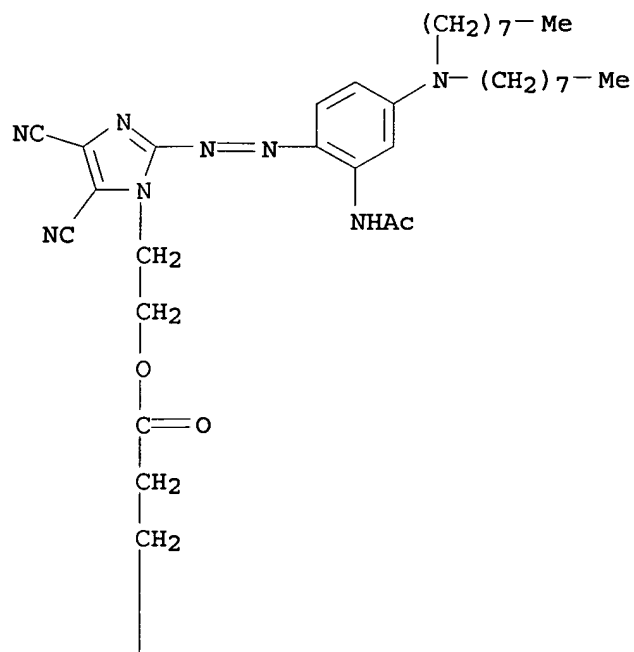
IT 410089-77-9P 410089-78-0P 410089-79-1P
410089-81-5P 410089-82-6P 410089-83-7P
410089-84-8P 410089-85-9P 410089-86-0P
410089-87-1P 410089-88-2P 410089-89-3P
410089-90-6P 410089-91-7P

(magenta colorant; azo dyes and use as magenta colorants for color toners)

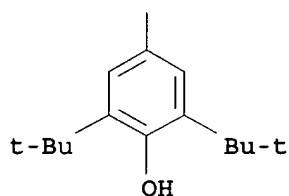
RN 410089-77-9 HCAPLUS

CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

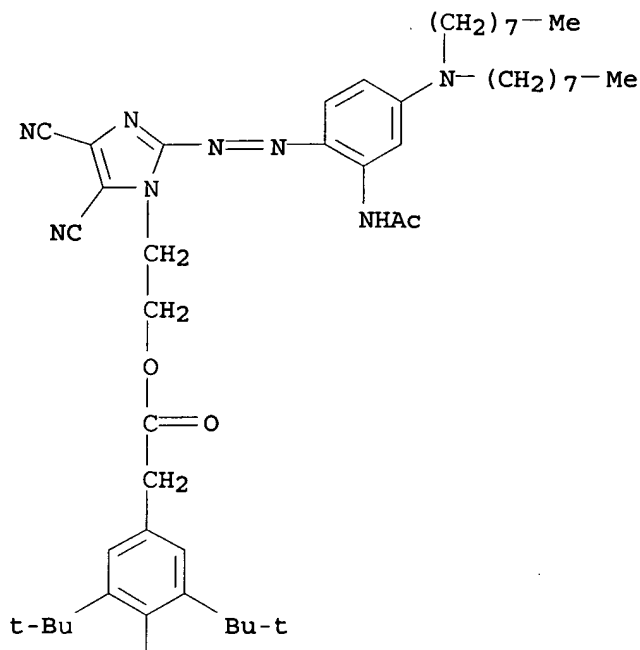


PAGE 2-A



RN 410089-78-0 HCAPLUS
 CN Benzeneacetic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 2-[2-[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-
 imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)

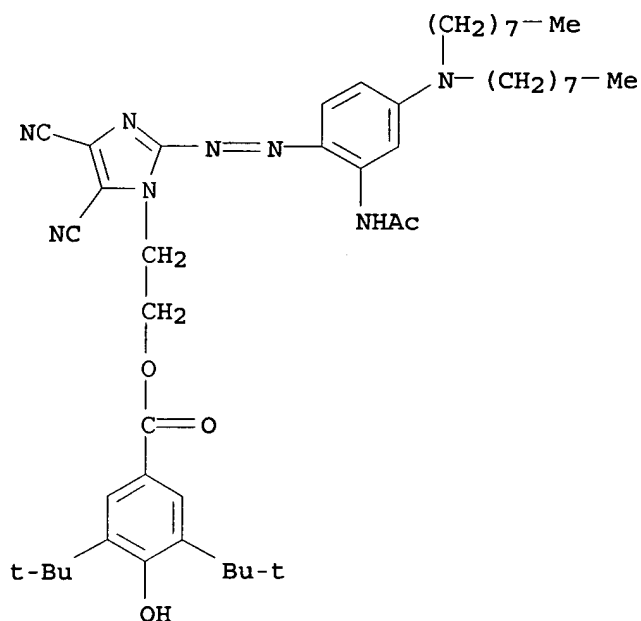
PAGE 1-A



PAGE 2-A

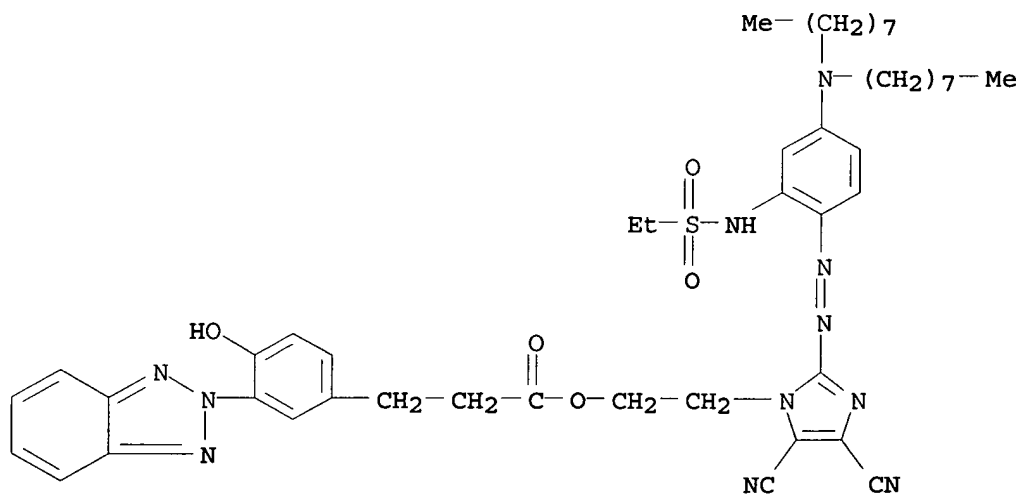


RN 410089-79-1 HCAPLUS
 CN Benzoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 2-[2-[[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-
 imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)



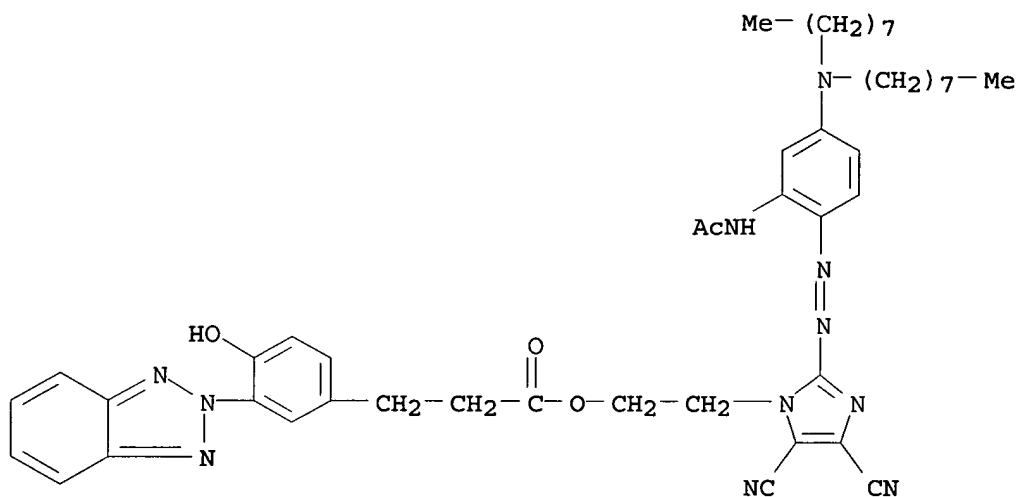
RN 410089-81-5 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-,
2-[4,5-dicyano-2-[[4-(dioctylamino)-2-
[(ethylsulfonyl)amino]phenyl]azo]-1H-imidazol-1-yl]ethyl ester
(9CI) (CA INDEX NAME)



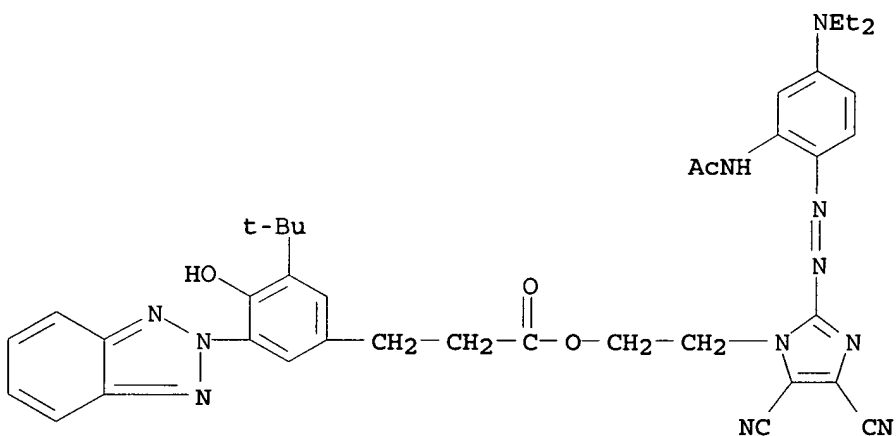
RN 410089-82-6 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-4-hydroxy-,
2-[2-[[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-
imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)



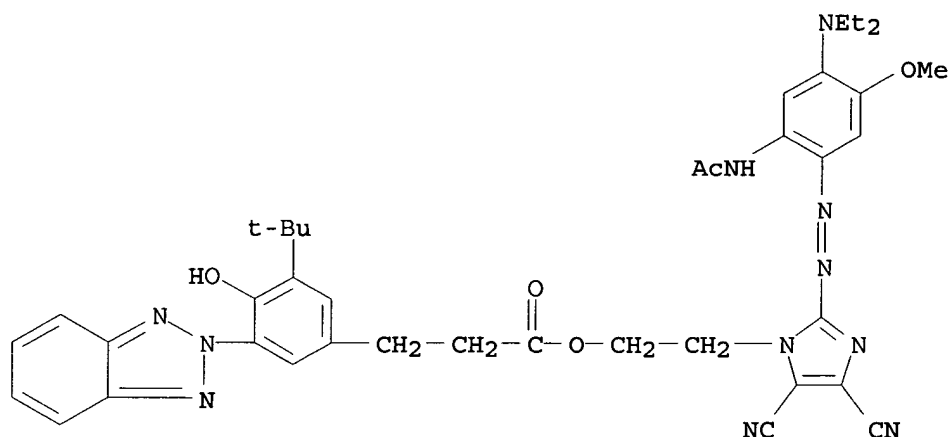
RN 410089-83-7 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[2-(acetylamino)-4-(diethylamino)phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)



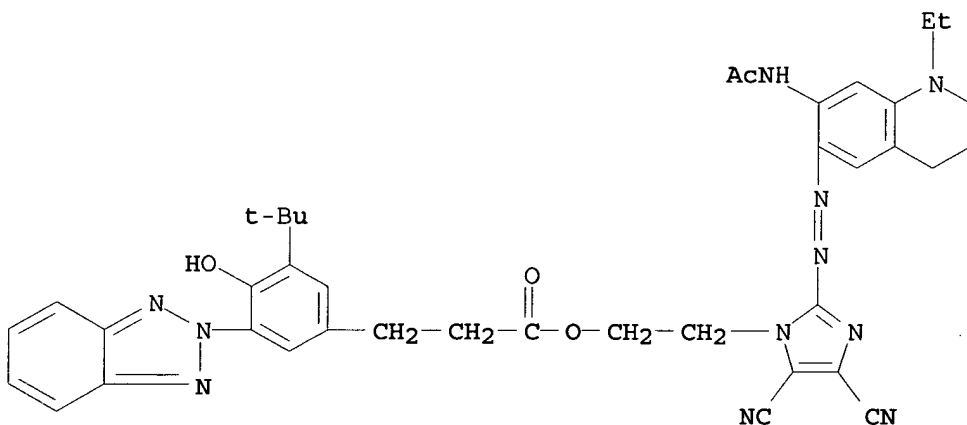
RN 410089-84-8 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[2-(acetylamino)-4-(diethylamino)-5-methoxyphenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)



RN 410089-85-9 HCAPLUS

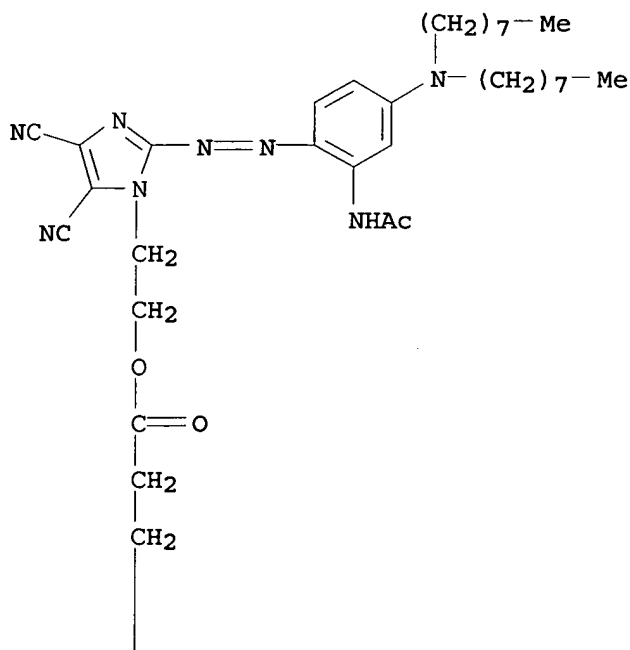
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[7-(acetylamino)-1-ethyl-1,2,3,4-tetrahydro-6-quinolinyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)



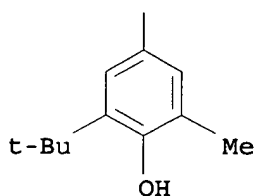
RN 410089-86-0 HCAPLUS

CN Benzenepropanoic acid, 3-(1,1-dimethylethyl)-4-hydroxy-5-methyl-, 2-[2-[[2-(acetylamino)-4-(dioctylamino)phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)

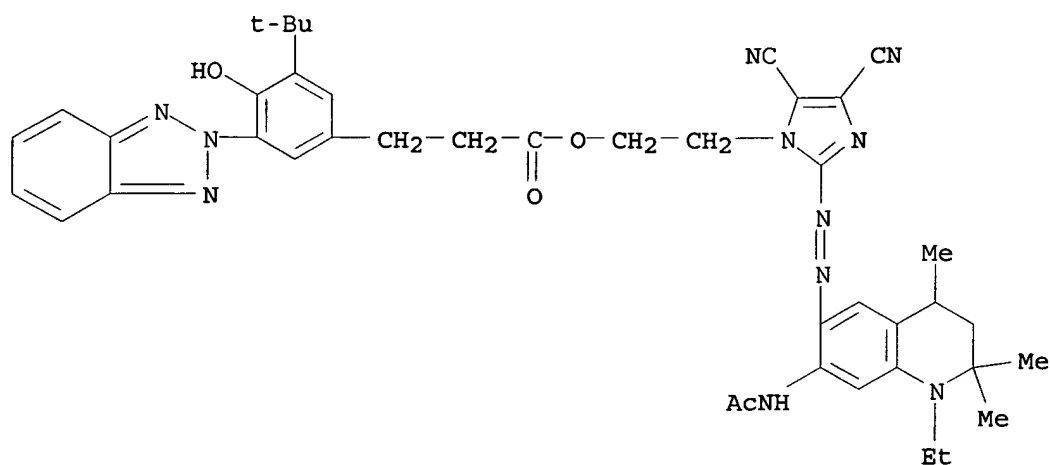
PAGE 1-A



PAGE 2-A

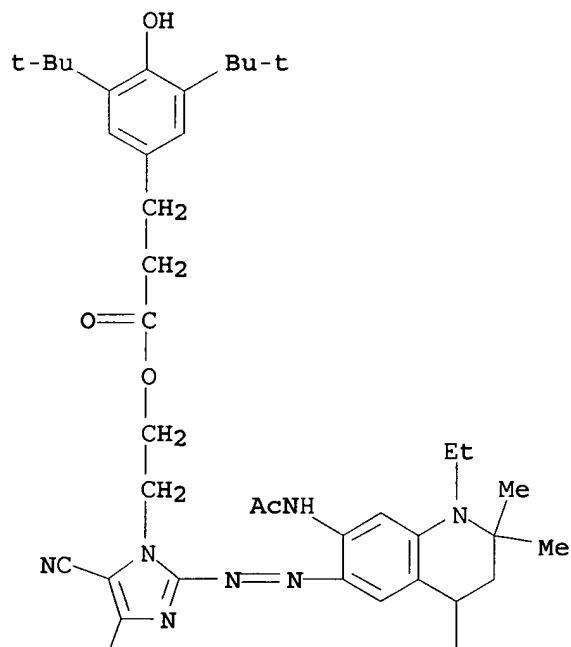


RN	410089-87-1	HCAPLUS
CN	Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[7-(acetyl-amino)-1-ethyl-1,2,3,4-tetrahydro-2,2,4-trimethyl-6-quinolinyl]azo]-4,5-dicyano-1H-imidazo-1-yl]ethyl ester (9CI) (CA INDEX NAME)	



RN 410089-88-2 HCAPLUS
 CN Benzenepropanoic acid, 3,5-bis(1,1-dimethylethyl)-4-hydroxy-,
 2-[2-[[7-(acetylamino)-1-ethyl-1,2,3,4-tetrahydro-2,2,4-trimethyl-
 6-quinolinyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI)
 (CA INDEX NAME)

PAGE 1-A



PAGE 2-A

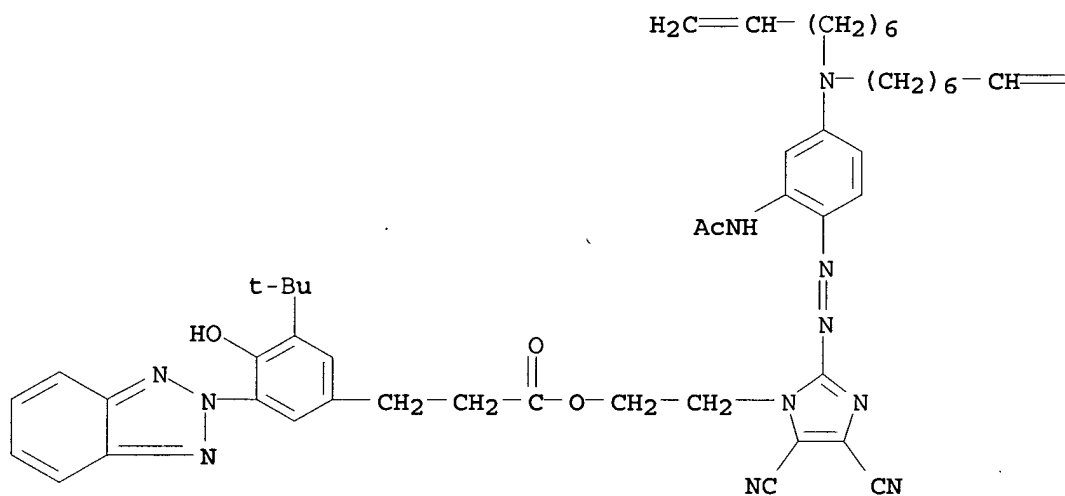
$$\begin{array}{c} / \\ \text{NC} \end{array}$$

$$\begin{array}{c} | \\ \text{Me} \end{array}$$

RN 410089-89-3 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[2-(acetylamino)-4-(di-7-octenylamino)phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A

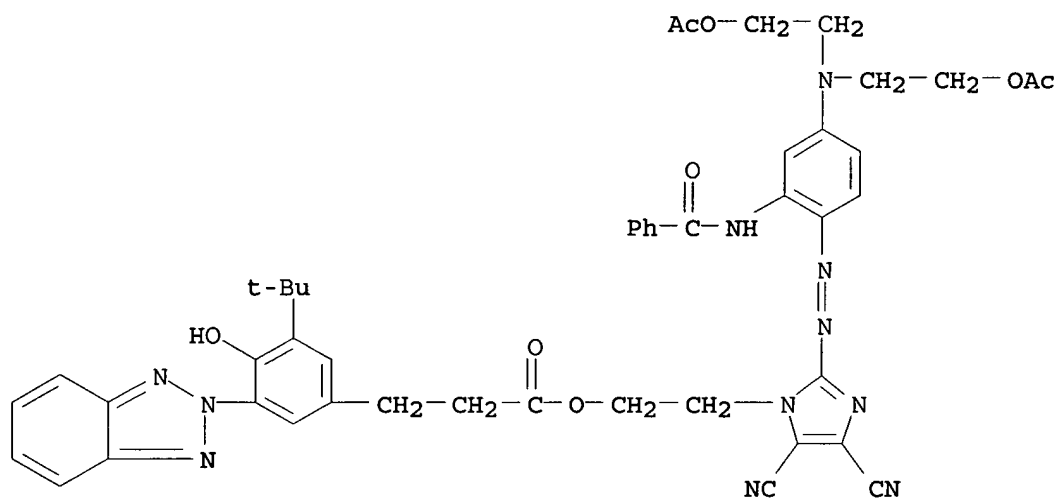


PAGE 1-B

=CH₂

RN 410089-90-6 HCAPLUS

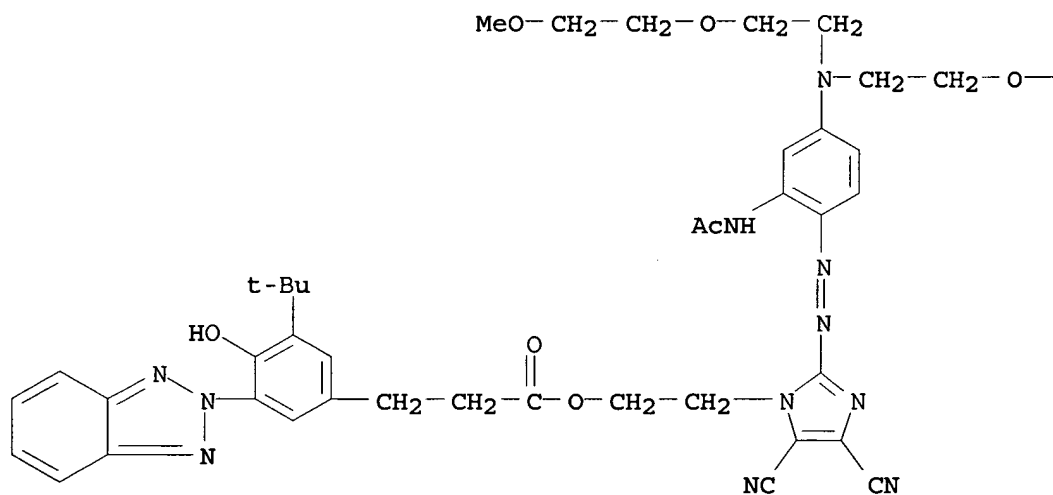
CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[2-(benzoylamino)-4-[bis[2-(acetyloxy)ethyl]amino]phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)



RN 410089-91-7 HCAPLUS

CN Benzenepropanoic acid, 3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxy-, 2-[2-[[2-(acetylamino)-4-[bis[2-(2-methoxyethoxy)ethyl]amino]phenyl]azo]-4,5-dicyano-1H-imidazol-1-yl]ethyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 1-B

—CH₂—CH₂—OMe

IC ICM C09B029-09

ICS C08K005-3445; C08L101-00; G03G009-09

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

Section cross-reference(s): 74

IT 77911-27-4P 410089-59-7P 410089-60-0P 410089-61-1P
 410089-62-2P 410089-63-3P 410089-64-4P 410089-65-5P
 410089-66-6P 410089-67-7P 410089-68-8P 410089-69-9P
 410089-70-2P 410089-71-3P 410089-72-4P 410089-73-5P
 410089-74-6P 410089-75-7P 410089-76-8P 410089-77-9P
 410089-78-0P 410089-79-1P 410089-80-4P
 410089-81-5P 410089-82-6P 410089-83-7P
 410089-84-8P 410089-85-9P 410089-86-0P
 410089-87-1P 410089-88-2P 410089-89-3P
 410089-90-6P 410089-91-7P
 (magenta colorant; azo dyes and use as magenta colorants for
 color toners)

L21 ANSWER 8 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:524704 HCAPLUS

DOCUMENT NUMBER: 135:114408

TITLE: Photoelectrochemical cell comprising polymer
 electrolyte composition formed by polymerizing
 ionic liquid crystal monomer

INVENTOR(S): Ono, Michio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 43 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1116769	A2	20010718	EP 2001-100999	2001 0117
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001202995	A2	20010727	JP 2000-8054	2000 0117
US 2002034690	A1	20020321	US 2001-759363	2001 0116
US 6727023	B2	20040427		
PRIORITY APPLN. INFO.:			JP 2000-8054	A 2000 0117

OTHER SOURCE(S): MARPAT 135:114408

AB Disclosed is an electrolyte composition comprising a polymer compound
 formed by polymerizing an ionic liquid crystal monomer containing at least
 one polymerizable group. Also disclosed are an electrochem. cell,
 a nonaq. secondary cell and a photoelectrochem. cell, each
 comprising the electrolyte composition. In accordance with the present
 invention, an electrolyte which does not substantially volatilize
 and exhibits excellent charge-transporting properties can be
 obtained, making it possible to obtain a photoelectrochem. cell
 having excellent photoelec. conversion properties and less
 deterioration of properties with time. Further, a lithium
 ion-conducting material having an extremely high ionic conductivity at

low temps. can be obtained.

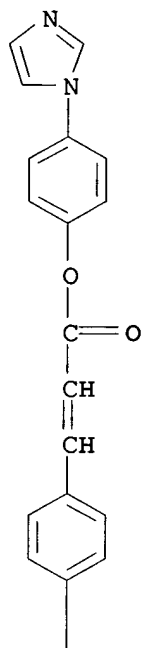
IT 350507-50-5P

(in preparation of ionic liquid crystal monomer containing polymerizable group)

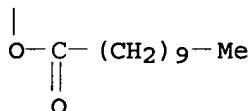
RN 350507-50-5 HCAPLUS

CN Undecanoic acid, 4-[3-[4-(1H-imidazol-1-yl)phenoxy]-3-oxo-1-propenyl]phenyl ester (9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



IC ICM C09K019-00

ICS C09K019-38; H01G009-20

CC 74-1 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

Section cross-reference(s): 72

IT 42749-27-9P 42749-28-0P 85689-41-4P 118798-05-3P

136399-07-0P 139475-37-9P 155062-34-3P 188915-80-2P

261508-74-1P 307558-21-0P 350507-45-8P 350507-46-9P

350507-47-0P 350507-48-1P 350507-49-2P 350507-50-5P

(in preparation of ionic liquid crystal monomer containing polymerizable group)

L21 ANSWER 9 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:62567 HCAPLUS

USHA SHRESTHA EIC 1700 REM 4B28

DOCUMENT NUMBER: 134:132600
 TITLE: Radiation-curable resin compositions for making color filters
 INVENTOR(S): Sakurai, Koichi; Watanabe, Takeshi
 PATENT ASSIGNEE(S): JSR Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 17 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001021713	A2	20010126	JP 1999-189882	1999 0705

PRIORITY APPLN. INFO.: JP 1999-189882
 1999
 0705

OTHER SOURCE(S): MARPAT 134:132600

AB The compns. comprise (A) colorants, (B) alkali-soluble resins, (C) polyfunctional monomers, (D) (meth)acrylate esters bearing imidazolyl groups, and (E) photoinitiators. Thus, mixing a C.I. Pigment Red 177/C.I. Pigment Red 224 65:35 mixture 100 with a benzyl methacrylate-glycerol monomethacrylate-methacrylic acid-N-phenylmaleimide-styrene copolymer 70, dipentaerythritol hexaacrylate 80, 2-(2'-methylimidazolyl)ethyl methacrylate 10, 2-benzyl-2-dimethylamino-1-(4-morpholinophenyl)-1-butanone 50 and propylene glycol monomethyl ether acetate 1000 parts, coating the resulting mixture on the surface of a soda glass, pre-baking, irradiating with UV light via a photomask, developing in a KOH solution, washing and post baking gave a color filter.

IT 321849-21-2, Benzyl methacrylate-dipentaerythritol hexaacrylate-glycerol monomethacrylate-2-(2'-methylimidazolyl)ethyl methacrylate-methacrylic acid-N-phenylmaleimide-styrene copolymer 321849-22-3, Benzyl methacrylate-dipentaerythritol hexaacrylate-2-(2-methyl-1-imidazolyl)ethyl methacrylate-methacrylic acid-styrene copolymer 321849-24-5 321849-25-6

(radiation-curable resin compns. for making color filters)

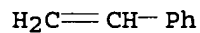
RN 321849-21-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-methyl-2-propenoate, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and 1,2,3-propanetriol mono(2-methyl-2-propenoate) (9CI) (CA INDEX NAME)

CM 1

CRN 34375-24-1

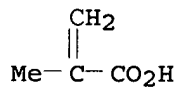
CMF C10 H14 N2 O2



CM 6

CRN 79-41-4

CMF C4 H6 O2



CM 7

CRN 50853-28-6

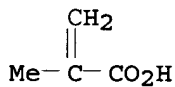
CMF C7 H12 O4

CCI IDS

CM 8

CRN 79-41-4

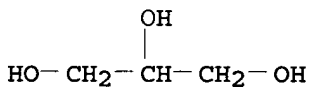
CMF C4 H6 O2



CM 9

CRN 56-81-5

CMF C3 H8 O3



RN 321849-22-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene,
 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-methyl-2-propenoate,
 2-[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-
 propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-
 propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and
 phenylmethyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 34375-24-1

CMF C10 H14 N2 O2



CMF C28 H34 O13



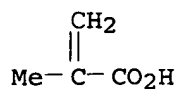
CMF C11 H12 O2



CMF C8 H8



CMF	C4	H6	O2
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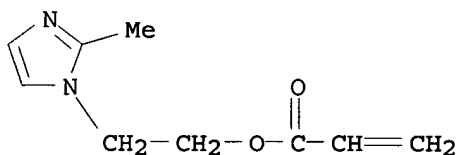
RN 321849-24-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene, α -hydro- ω -[(1-oxo-2-propenyl)oxy]poly[oxy(1-oxo-1,6-hexanediyl)], 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-propenoate, 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl 2-methyl-2-propenoate, 1-phenyl-2H-pyrrole-2,5-dione and 1,2,3-propanetriol mono(2-methyl-2-propenoate), graft (9CI) (CA INDEX NAME)

CM 1

CRN 321849-23-4

CMF C9 H12 N2 O2

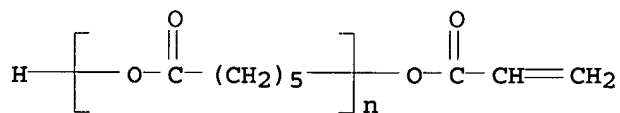


CM 2

CRN 97387-29-6

CMF (C6 H10 O2)_n C3 H4 O2

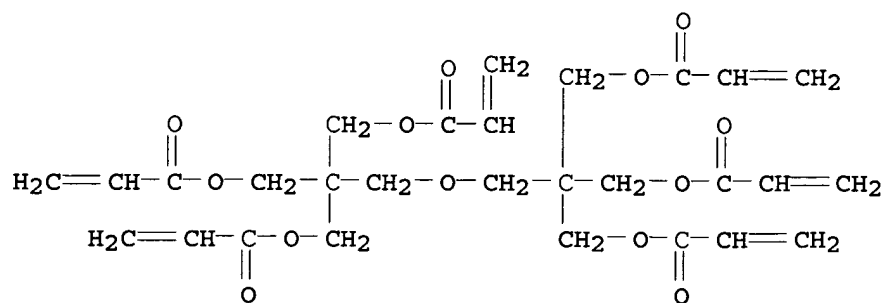
CCI PMS



CM 3

CRN 29570-58-9

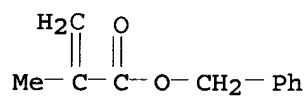
CMF C28 H34 O13



CM 4

CRN 2495-37-6

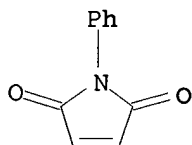
CMF C11 H12 O2



CM 5

CRN 941-69-5

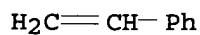
CMF C10 H7 N O2



CM 6

CRN 100-42-5

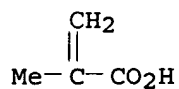
CMF C8 H8



CM 7

CRN 79-41-4

CMF C4 H6 O2



CM 8

CRN 50853-28-6

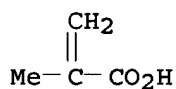
CMF C7 H12 O4

CCI IDS

CM 9

CRN 79-41-4

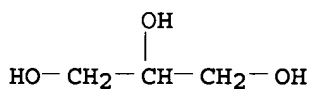
CMF C4 H6 O2



CM 10

CRN 56-81-5

CMF C3 H8 O3



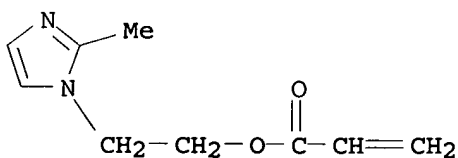
RN 321849-25-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene,
 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-propenoate, 2-oxepanone,
 2-[[3-[(1-oxo-2-propenyl)oxy]-2,2-bis[[[(1-oxo-2-propenyl)oxy]methyl]propoxy]methyl]-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate, phenylmethyl
 2-methyl-2-propenoate, 1-phenyl-1H-pyrrole-2,5-dione and
 1,2,3-propanetriol mono(2-methyl-2-propenoate), graft (9CI) (CA
 INDEX NAME)

CM 1

CRN 321849-23-4

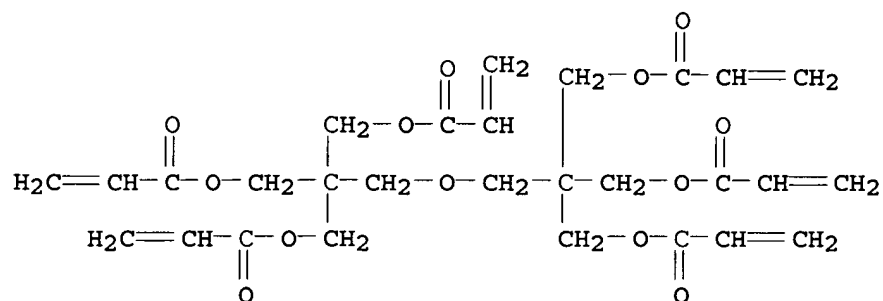
CMF C9 H12 N2 O2



CM 2

CRN 29570-58-9

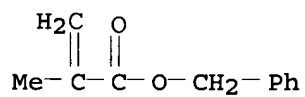
CMF C28 H34 O13



CM 3

CRN 2495-37-6

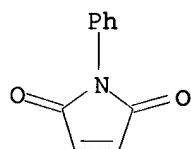
CMF C11 H12 O2



CM 4

CRN 941-69-5

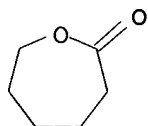
CMF C10 H7 N O2



CM 5

CRN 502-44-3

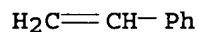
CMF C6 H10 O2



CM 6

CRN 100-42-5

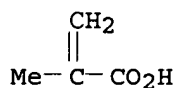
CMF C8 H8



CM 7

CRN 79-41-4

CMF C4 H6 O2



CM 8

CRN 50853-28-6

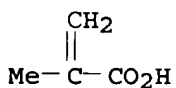
CMF C7 H12 O4

CCI IDS

CM 9

CRN 79-41-4

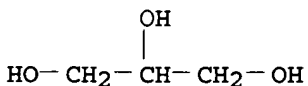
CMF C4 H6 O2



CM 10

CRN 56-81-5

CMF C3 H8 O3



IC ICM G02B005-20

ICS C08F002-48; C08F291-06; G03F007-004; G03F007-027; G03F007-032

CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 74, 76

IT 321849-21-2, Benzyl methacrylate-dipentaerythritol

hexaacrylate-glycerol monomethacrylate-2-(2'-

methylimidazolyl)ethyl methacrylate-methacrylic

acid-N-phenylmaleimide-styrene copolymer 321849-22-3,

Benzyl methacrylate-dipentaerythritol hexaacrylate-2-(2-methyl-1-imidazolyl)ethyl methacrylate-methacrylic acid-styrene copolymer
321849-24-5 321849-25-6

(radiation-curable resin compns. for making color filters)

L21 ANSWER 10 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2001:46045 HCAPLUS

DOCUMENT NUMBER: 134:123652

TITLE: Radiation-sensitive compositions giving patterns with high hardness and color filters using them

INVENTOR(S): Sakurai, Koichi; Watanabe, Takeshi

PATENT ASSIGNEE(S): JSR Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 2001013313	A2	20010119	JP 1999-183052	1999 0629
PRIORITY APPLN. INFO.: JP 1999-183052				1999 0629

AB The compns. contain (A) coloring agents, (B) alkali-soluble polymers containing copolymers of 1-[CH₂:CR₁CO₂(CH₂)_n]-2-R₂-imidazole (R₁ = H, Me; R₂ = H, C1-5 alkyl; n = 1-5) and other monomers, (C) polyfunctional monomers, and (D) photopolymer. initiators. The color filters have pixels obtained from them. The filters are useful for liquid-crystal displays, image-pickup devices, etc. The compns. give pixels with high solvent **resistance** and good adhesion to substrates and light-shielding layers.

IT 320730-33-4, Benzyl methacrylate-2-hydroxyethyl methacrylate-methacrylic acid-1-(2-methacryloyloxyethyl)-2-methylimidazole copolymer 320730-35-6, Benzyl methacrylate-methacrylic acid-1-(2-methacryloyloxyethyl)-2-methylimidazole-N-phenylmaleimide-styrene copolymer (radiation-sensitive compns. giving solvent-**resistant** pixels for color filters)

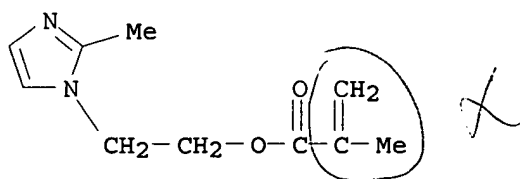
RN 320730-33-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with 2-hydroxyethyl 2-methyl-2-propenoate, 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-methyl-2-propenoate and phenylmethyl 2-methyl-2-propenoate (9CI)
(CA INDEX NAME)

CM 1

CRN 34375-24-1

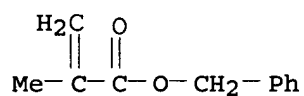
CMF C10 H14 N2 O2



CM 2

CRN 2495-37-6

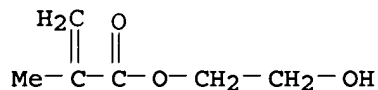
CMF C11 H12 O2



CM 3

CRN 868-77-9

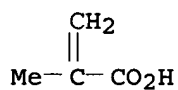
CMF C6 H10 O3



CM 4

CRN 79-41-4

CMF C4 H6 O2



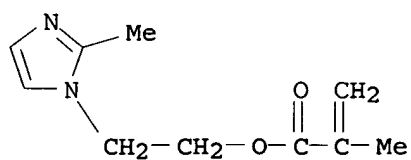
RN 320730-35-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, polymer with ethenylbenzene,
 2-(2-methyl-1H-imidazol-1-yl)ethyl 2-methyl-2-propenoate,
 phenylmethyl 2-methyl-2-propenoate and 1-phenyl-1H-pyrrole-2,5-
 dione (9CI) (CA INDEX NAME)

CM 1

CRN 34375-24-1

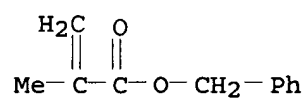
CMF C10 H14 N2 O2



CM 2

CRN 2495-37-6

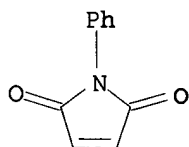
CMF C11 H12 O2



CM 3

CRN 941-69-5

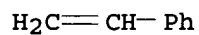
CMF C10 H7 N O2



CM 4

CRN 100-42-5

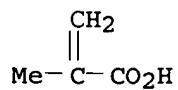
CMF C8 H8



CM 5

CRN 79-41-4

CMF C4 H6 O2



IC ICM G02B005-20

ICS G03F007-004; G03F007-027; G03F007-028; G03F007-033;
G02F001-1335

CC 74-13 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
 Section cross-reference(s): 38, 73

ST radiation sensitive alkali soluble imidazole polymer; color filter
 radiation sensitive imidazole polymer; hardness imidazole polymer
 pattern color filter; solvent **resistance** imidazole
 polymer pattern color filter; liq crystal display filter imidazole
 polymer pattern

IT Liquid crystal displays
 Optical filters
 (radiation-sensitive compns. giving solvent-**resistant**
 pixels for color filters)

IT 67653-78-5P, Dipentaerythritol hexaacrylate homopolymer
 (radiation-sensitive compns. giving solvent-**resistant**
 pixels for color filters)

IT 320730-33-4, Benzyl methacrylate-2-hydroxyethyl
 methacrylate-methacrylic acid-1-(2-methacryloyloxyethyl)-2-
 methylimidazole copolymer 320730-35-6, Benzyl
 methacrylate-methacrylic acid-1-(2-methacryloyloxyethyl)-2-
 methylimidazole-N-phenylmaleimide-styrene copolymer 320730-38-9
 (radiation-sensitive compns. giving solvent-**resistant**
 pixels for color filters)

IT 29570-58-9, Dipentaerythritol hexaacrylate
 (radiation-sensitive compns. giving solvent-**resistant**
 pixels for color filters)

L21 ANSWER 11 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:839116 HCAPLUS

DOCUMENT NUMBER: 134:18658

TITLE: Azo colorant, colored fine particles and
 dispersion for aqueous ink for ink jet
 recording

INVENTOR(S): Matsuzaki, Yoriaki; Oi, Ryu; Okuma, Tadashi;
 Kohgo, Osamu

PATENT ASSIGNEE(S): Mitsui Chemicals, Inc., Japan

SOURCE: Eur. Pat. Appl., 27 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 1055712	A2	20001129	EP 2000-304377	2000 0524
EP 1055712	A3	20020109		
EP 1055712	B1	20050216		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2001040235	A2	20010213	JP 2000-141110	2000 0515
TW 554013	B	20030921	TW 2000-89110015	2000 0524
CN 1281015	A	20010124	CN 2000-120087	2000

PRIORITY APPLN. INFO.:

JP 1999-144970

A

0525

1999

0525

OTHER SOURCE(S): MARPAT 134:18658

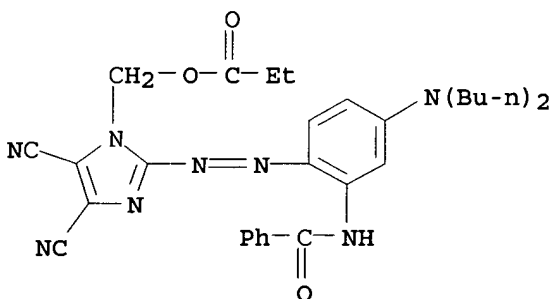
AB Aqueous ink for ink jet recording contains ≥ 1 water-insol. coloring matter, H₂O and a resin emulsion, the azo colorant is excellent in storage stability, H₂O and light resistance and compatibility with the resin. A dispersion of polyester 100, MEK 150, THF 150, and colorant 10 parts was added to glycerin and water to form an ink for jet printing of dense (OD >1.1) images having water and lightfastness.

IT 310445-20-6 310445-21-7

(colorant; in aqueous ink for ink jet recording of images having water and lightfastness)

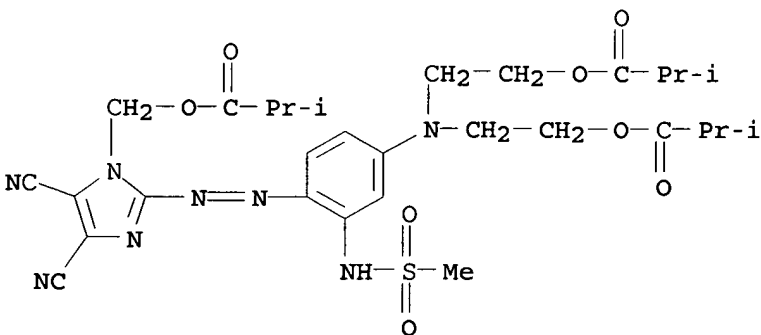
RN 310445-20-6 HCAPLUS

CN Benzamide, N-[5-(dibutylamino)-2-[[4,5-dicyano-1-[(1-oxopropoxy)methyl]-1H-imidazol-2-yl]azo]phenyl]- (9CI) (CA INDEX NAME)



RN 310445-21-7 HCAPLUS

CN Propanoic acid, 2-methyl-, [[4-[[4,5-dicyano-1-[(2-methyl-1-oxopropoxy)methyl]-1H-imidazol-2-yl]azo]-3-[(methylsulfonyl)amino]phenyl]imino]di-2,1-ethanediyl ester (9CI) (CA INDEX NAME)



IC ICM C09D011-02

ICS C09D011-10; C09B029-09

CC 42-12 (Coatings, Inks, and Related Products)
Section cross-reference(s): 41

IT 310445-05-7 310445-07-9 310445-09-1 310445-10-4
 310445-11-5 310445-12-6 310445-13-7 310445-14-8
 310445-15-9 310445-16-0 310445-17-1 310445-18-2
 310445-19-3 310445-20-6 310445-21-7
 310445-22-8 310445-23-9 310445-24-0 310445-25-1
 310445-26-2 310445-27-3 310445-28-4 310445-29-5
 310445-30-8 310445-31-9 310445-32-0 310445-33-1
 310445-34-2 310445-35-3 310445-36-4 310445-37-5
 310445-38-6 310445-39-7 310445-40-0

(colorant; in aqueous ink for ink jet recording of images having water and lightfastness)

L21 ANSWER 12 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2000:817497 HCAPLUS

DOCUMENT NUMBER: 134:6950

TITLE: Electrolytes, liquid crystalline compositions, liquid crystalline compounds, liquid crystalline mixtures, batteries, and photovoltaic cells

INVENTOR(S): Ono, Michio

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 41 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000319260	A2	20001121	JP 2000-53711	2000 0229
EP 1033731	A2	20000906	EP 2000-103822	2000 0223
EP 1033731	A3	20040225		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
US 6495067	B1	20021217	US 2000-516628	2000 0301

PRIORITY APPLN. INFO.: JP 1999-53162 A 1999
0301

JP 1999-55636 A 1999
0303

OTHER SOURCE(S): MARPAT 134:6950

GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT
 *

AB Claimed electrolytes comprise liquid crystalline compds. I [R111 is (substituted) alkyl, alkenyl; Z111 forms 5- or 6-membered aromatic ring cation with N; R121 is a substituent containing ≥ 1 ring and alkyl or alkenyl to give liquid crystalline property; X111- is an anion]. Claimed liquid crystalline compns. comprise pyridinium compds. II or imidazolium compds. III (R341, R351, R361, and R371 are H or substituents; R311 and R331 are alkyl or alkenyl; Y311 is 4- or 7-membered divalent ring; Q311 and Q321 are divalent group; n = 1-3). Claimed liquid crystalline compds. are represented as IV or V (Q111 is a divalent group; R141, R151, R161, R171 are H or substituent; R131 is alkyl or alkenyl; Y111 is divalent 4, 5, 6, 7-membered substituent; Q121 and Q131 are divalent group). Mixts. containing ≥ 2 IV and/or V are also claimed. Claimed electrolytes may comprise the above compds. Claimed batteries comprise the above electrolytes. The photovoltaic cells comprise charge-transfer layers containing the electrolytes and semiconductors responding to radiant rays. The semiconductors may be sensitized with dyes. The electrolytes provide good charge transportation and low volatilization and resulting solar cells have high conversion efficiency and durability.

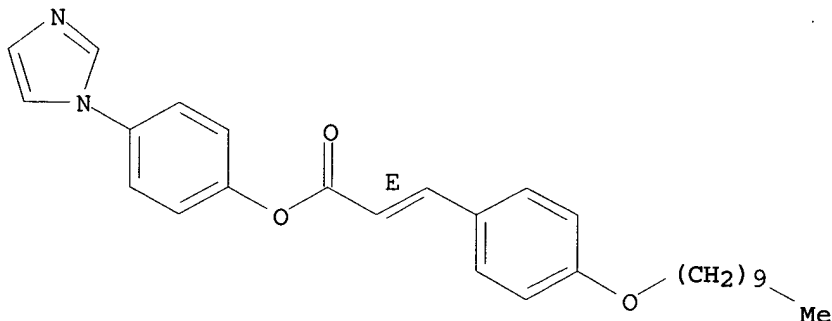
IT 307558-23-2P

(preparation and reaction of; in preparation of liquid crystalline electrolytes for solar cells)

RN 307558-23-2 HCAPLUS

CN 2-Propenoic acid, 3-[4-(decyloxy)phenyl]-, 4-(1H-imidazol-1-yl)phenyl ester, (2E)- (9CI) (CA INDEX NAME)

Double bond geometry as shown.



IC ICM C07D213-56

ICS C07D213-30; C07D213-68; C07D233-60; C09K019-34; G02F001-13; H01L031-04; H01M010-40; H01M014-00

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology) Section cross-reference(s): 74

IT 4372-29-6P 77251-82-2P 139475-37-9P 202813-37-4P
208103-37-1P 307558-21-0P 307558-22-1P 307558-23-2P

(preparation and reaction of; in preparation of liquid crystalline electrolytes for solar cells)

L21 ANSWER 13 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1996:301109 HCAPLUS

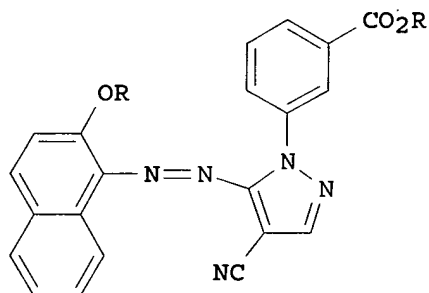
DOCUMENT NUMBER: 124:346021

TITLE: Dyes for wool, polyamide fibers and leather, having a reactive carboxylic anhydride group

INVENTOR(S): De Moura, Joao Carlos Vidaurre Pais; De
Oliviera-Campos, Ana Maria Ferreira; Maia,
Hernani Lopes Da Silva; Hrdina, Radim
PATENT ASSIGNEE(S): Gomes, Jaime Isidoro Naylor Rocha, Port.
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
EP 700973	A1	19960313	EP 1995-670003	1995 0413
R: BE, CH, DE, GB, IT, LI, PT				
PRIORITY APPLN. INFO.:			PT 1994-101492	A 1994 0415

OTHER SOURCE(S): MARPAT 124:346021
GI



AB The dyes, mainly for wool and polyamide fibers and polyester-wool blends, but also suitable for silk and leather, contain a reactive group of the mixed anhydride type -CO₂CO₂R [R = C₁-6 (halo)alkyl, (un)substituted Ph, (un)substituted PhCH₂], which reacts covalently with proteinaceous and polyamide fibers, thus ensuring a high washfastness to alkaline conditions. In their insol. form, the dyes which are devoid of sulfo groups are absorbed by wool only above 70°, showing high migration at this temperature, thus giving more uniform dyeings than when other reactive dyes are used. In their soluble form, dyes containing sulfo groups show a good performance, namely high washfastness on polyamide dyeings. Thus, a DMF solution of I (R = H) was treated with ClCO₂Et in the presence of Et₃N to give orange I (R = CO₂Et).

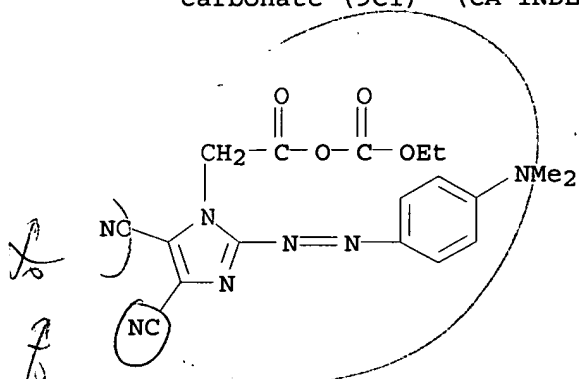
IT 176542-98-6P

(red; reactive dyes having a carboxylic anhydride group for wool and polyamide fibers and leather)

RN 176542-98-6 HCAPLUS

CN 1H-Imidazole-1-acetic acid, 4,5-dicyano-2-[[4-

(dimethylamino)phenyl]azo]-, anhydride with ethyl hydrogen carbonate (9CI) (CA INDEX NAME)



IC ICM C09B062-78

CC 41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

IT 176542-93-1P 176542-98-6P

(red; reactive dyes having a carboxylic anhydride group for wool and polyamide fibers and leather)

L21 ANSWER 14 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1993:125868 HCAPLUS

DOCUMENT NUMBER: 118:125868

TITLE: Photopolymerizable 2-alkyl-1-(2-methacryloyloxyethyl)imidazoles as crosslinking catalysts for epoxy resins

INVENTOR(S): Yoshioka, Takashi; Murai, Takayuki

PATENT ASSIGNEE(S): Shikoku Chemicals Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 3 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 04308578	A2	19921030	JP 1991-102083	1991 0405

PRIORITY APPLN. INFO.: JP 1991-102083

1991
0405

1991
0405

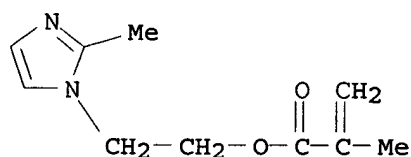
AB The title imidazoles are useful for curing epoxy resins, giving photocurable products for use as **resists**. Reacting methacryloyl chloride with 1-(2-hydroxyethyl)-2-undecylimidazole in THF containing Et3N and phenothiazine gave 1-(2-methacryloyloxyethyl)-2-undecylimidazole.

IT 34375-24-1P 62037-81-4P 146490-90-6P

(preparation of, as epoxy resin hardener and **photoresist**)

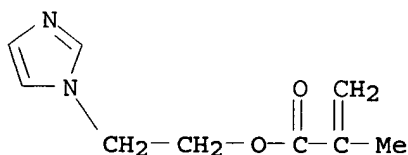
RN 34375-24-1 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-methyl-1H-imidazol-1-yl)ethyl ester (9CI) (CA INDEX NAME)



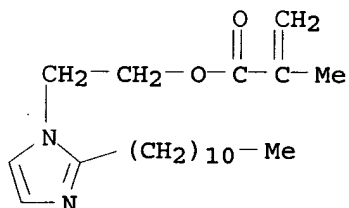
RN 62037-81-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(1H-imidazol-1-yl)ethyl ester (9CI)
(CA INDEX NAME)



RN 146490-90-6 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(2-undecyl-1H-imidazol-1-yl)ethyl
ester (9CI) (CA INDEX NAME)



IC ICM C07D233-60

ICS C08G059-40

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 35, 74

ST methacryloyloxyethylimidazole curing epoxy **photoresist**;
resist photo methacryloyloxyethylimidazole epoxy;
imidazole methacryloyloxyethyl curing epoxy **photoresist**;
crosslinking methacryloyloxyethylimidazole epoxy
photoresist; photocuring methacryloyloxyethylimidazole
epoxy resin

IT Crosslinking

((methacryloyloxyethyl)imidazole-cured epoxy resins for, as
photoresists)

IT Crosslinking agents

Crosslinking catalysts

((methacryloyloxyethyl)imidazoles, for epoxy resins, for
photoresists)

IT Epoxy resins, miscellaneous

(curing agents for, (methacryloyloxyethyl)imidazoles as, for
photoresists)

IT **Resists**

(photo-, (methacryloyloxyethyl)imidazole-cured epoxy resins
for)

IT 34375-24-1P 62037-81-4P 146490-90-6P
(preparation of, as epoxy resin hardener and photoresist)

L21 ANSWER 15 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1990:523910 HCAPLUS
 DOCUMENT NUMBER: 113:123910
 TITLE: Electrophotographic preparation of lithographic plate using organic photoconductor
 INVENTOR(S): Kato, Eiichi; Ishii, Kazuo
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 25 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	
JP 02039058	A2	19900208	JP 1988-186917	1988 0728
JP 2640127	B2	19970813		
PRIORITY APPLN. INFO.:			JP 1988-186917	1988 0728

AB In the title photoconductor having on an elec. conductive support a photoconductive layer containing at least a photoconductive compound and a binder resin for use to prepare a lithog. plate by imagewise exposure, development to form toner images, and removing the nonimage area of the photoconductive layer, the binder resin of the photoconductive layer contains a copolymer having ≥ 1 monomer component containing ≥ 1 functional group which forms ≥ 1 CO₂H group by decomposition

IT 129022-45-3
(electrophotog. photoconductors containing, for lithog. plate preparation)

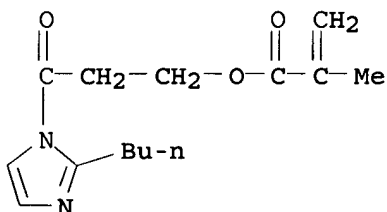
RN 129022-45-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with
 3-(2-butyl-1H-imidazol-1-yl)-3-oxopropyl 2-methyl-2-propenoate and
 2-carboxyethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

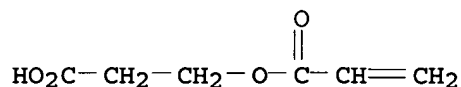
CRN 129022-44-2

CMF C14 H20 N2 O3



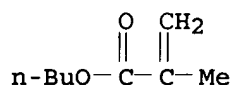
CM 2

CRN 24615-84-7
CMF C6 H8 O4



CM 3

CRN 97-88-1
CMF C8 H14 O2



IC ICM G03G013-28
ICS B41N001-14; G03G005-05
CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
IT 1679-98-7 82532-74-9 82532-76-1 100235-24-3 129022-28-2
129022-29-3 129022-30-6 129022-31-7 129022-32-8
129022-34-0 129022-36-2 129022-37-3 129022-38-4
129022-39-5 129022-41-9 129022-42-0 129022-43-1
129022-45-3 129022-46-4 129045-59-6
(electrophotog. photoconductors containing, for lithog. plate
preparation)

L21 ANSWER 16 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:506468 HCAPLUS
DOCUMENT NUMBER: 113:106468
TITLE: Electrophotographic material for lithographic
plate preparation
INVENTOR(S): Kato, Eiichi; Ishii, Kazuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 21 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01284861	A2	19891116	JP 1988-113458	1988 0512
PRIORITY APPLN. INFO.:				JP 1988-113458
				1988 0512

AB In the title material made by forming on an elec. conductive support ≥ 1 photoconductive layer and a surface layer, the surface layer comprises mainly a polymer containing a copolymer component containing ≥ 1 functional group which produces ≥ 1 CO₂H upon decomposition and a crosslinking agent.

IT 128887-96-7
(electrophotog. material with surface layer containing, for lithog. plate preparation)

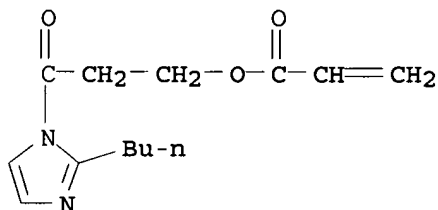
RN 128887-96-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 6-hydroxyhexyl ester, polymer with 3-(2-butyl-1H-imidazol-1-yl)-3-oxopropyl 2-propenoate, 1,6-diisocyanatohexane and propyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 124246-87-3

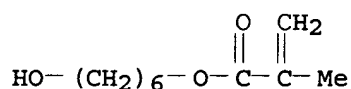
CMF C13 H18 N2 O3



CM 2

CRN 13092-57-4

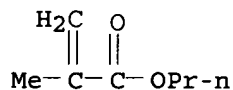
CMF C10 H18 O3



CM 3

CRN 2210-28-8

CMF C7 H12 O2



CM 4

CRN 822-06-0

CMF C8 H12 N2 O2

OCN- (CH₂)₆-NCO

IC ICM G03G005-14
ICS B41N001-14; G03G013-28
CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
IT 128887-91-2 128887-92-3 128887-93-4 128887-94-5
128887-95-6 **128887-96-7** 128887-97-8 128887-98-9
128887-99-0 128888-00-6 128888-01-7 128888-02-8
128888-03-9 128888-04-0 128977-37-7 128997-13-7
128997-14-8 128997-15-9 128997-16-0 128997-17-1
129027-50-5 129027-51-6 129027-52-7 129027-53-8
(electrophotog. material with surface layer containing, for lithog.
plate preparation)

L21 ANSWER 17 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:432026 HCAPLUS
DOCUMENT NUMBER: 113:32026
TITLE: Blanks for electrophotographic lithographic
plates
INVENTOR(S): Kato, Eiichi; Ishii, Kazuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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JP 01283572	A2	19891115	JP 1988-112607	

1988
0511

PRIORITY APPLN. INFO.: JP 1988-112607

1988
0511

AB The title blanks comprise an elec. conductive substrate, ≥1
photoconductor layer, and a surface layer, which contains
≥1 partially crosslinked resin containing ≥1 functional
group capable of forming ≥1 COOH by decomposition

IT **124238-86-4**
(surface layer from, for electrophotog. lithog. plate)

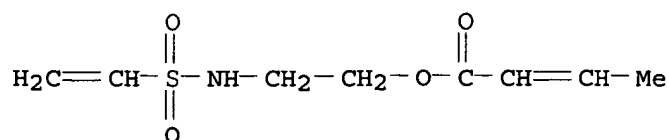
RN 124238-86-4 HCAPLUS

CN 2-Butenoic acid, 2-[(ethenylsulfonyl)amino]ethyl ester, polymer
ethyl 2-methyl-2-propenoate and 7-(1H-imidazol-1-yl)-7-oxoheptyl
2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 124238-85-3

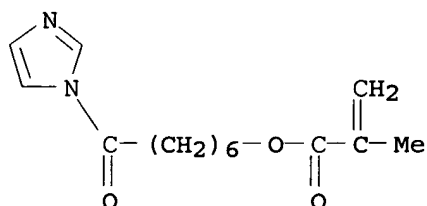
CMF C8 H13 N O4 S



CM 2

CRN 124238-84-2

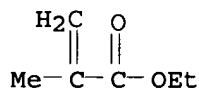
CMF C14 H20 N2 O3



CM 3

CRN 97-63-2

CMF C6 H10 O2



IC ICM G03G005-14

ICS B41N001-14; G03G013-28

CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)

IT 119359-85-2 124221-59-6 124221-66-5 124238-71-7

124238-75-1 124238-77-3 124238-78-4 124238-80-8

124238-83-1 124238-86-4 124261-86-5 124261-87-6

124261-88-7 127769-71-5 127769-72-6 127769-73-7

127769-75-9 127769-76-0 127769-77-1 127769-78-2

(surface layer from, for electrophotog. lithog. plate)

L21 ANSWER 18 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:66789 HCAPLUS

DOCUMENT NUMBER: 112:66789

TITLE: Electrophotographic material for lithographic
plate preparation

INVENTOR(S): Kato, Eiichi; Ishii, Kazuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 42 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

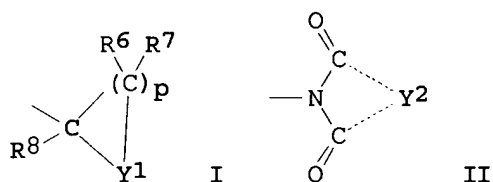
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 326169	A2	19890802	EP 1989-101477	1989 0127
EP 326169	A3	19910703		
EP 326169	B1	19940420		
R: DE, GB				
JP 01191860	A2	19890801	JP 1988-15847	1988 0128
JP 08020778	B4	19960304		
JP 01197765	A2	19890809	JP 1988-21354	1988 0202
JP 08020779	B4	19960304		
US 4960661	A	19901002	US 1989-303220	1989 0130
PRIORITY APPLN. INFO.:			JP 1988-15847	A 1988 0128
			JP 1988-21354	A 1988 0202

GI



AB An electrophotog. material for the preparation of a lithog. plate comprises a conductive support having provided thereon ≥ 1 photoconductive layer containing photoconductive ZnO and a resin binder which comprises ≥ 1 resin containing ≥ 1 functional group capable of forming ≥ 1 carboxyl group upon decomposition and a heat-curable resin and/or a photocurable resin and a crosslinking agent. The carboxyl-forming functional group contained in the resin is represented by the formula CO₂L where L = (CR₁R₂)_m(X)_nZ, MR₃R₄R₅, N = CHQ₁, COQ₂, NHOH, I, or II (R₁, R₂ = H or an aliphatic hydrocarbon group; X = an aromatic hydrocarbon group; Z = H, halogen, trihalomethyl, alkyl, CN, NO₂, SO₂R₉ where R₉ = a hydrocarbon group, CO₂R₁₀ where R₁₀ = a hydrocarbon group, or OR₁₁ where R₁₁ = a hydrocarbon group; m, n = 0, 1, or 2; R₃, R₄, R₅ = a hydrocarbon group or OR₁₂ where R₁₂ = a hydrocarbon group; M = Si, Sn, or Ti; Q₁, Q₂ = a hydrocarbon group; Y₁ = O or S; R₆, R₇, R₈ = H or an aliphatic hydrocarbon group; p = 3 or 4; Y₂ = an organic residual group forming a cyclic imido group). The electrophotog. material is not influenced by a variation of environmental conditions of

electrophotog. processing, exhibits excellent preservability before processing, and produces a lithog. plate exhibiting satisfactory hydrophilic properties on the nonimage areas and excellent printing durability.

IT 124246-88-4

(zinc oxide electrophotog. material containing photocurable or heat-curable resin and, for lithog. plate preparation)

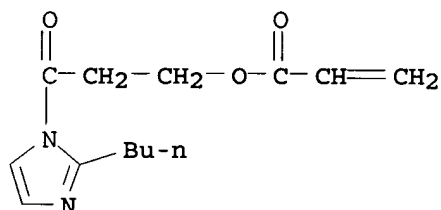
RN 124246-88-4 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 3-(2-butyl-1H-imidazol-1-yl)-3-oxopropyl 2-propenoate and 6-hydroxyhexyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 124246-87-3

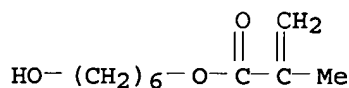
CMF C13 H18 N2 O3



CM 2

CRN 13092-57-4

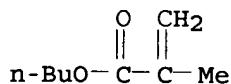
CMF C10 H18 O3



CM 3

CRN 97-88-1

CMF C8 H14 O2



IC ICM G03G013-28

ICS G03G005-05

CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

IT 124246-74-8 124246-75-9 124246-76-0 124246-78-2
 124246-79-3 124246-80-6 124246-82-8 124246-84-0
 124246-86-2 124246-88-4 124246-90-8 124246-92-0
 124246-93-1 124246-96-4 124274-35-7 124274-37-9

124296-08-8 124296-11-3 124296-12-4 124296-14-6
 124296-16-8 124296-17-9 124296-18-0 124296-20-4
 124296-21-5 124296-23-7 124296-25-9 124296-26-0
 124296-28-2 124296-29-3 124296-30-6 124296-32-8
 124296-34-0

(zinc oxide electrophotog. material containing photocurable or heat-curable resin and, for lithog. plate preparation)

L21 ANSWER 19 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1990:14314 HCAPLUS

DOCUMENT NUMBER: 112:14314

TITLE: Electrophotographic material for lithographic plate preparation

INVENTOR(S): Kato, Eiichi; Ishii, Kazuo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Eur. Pat. Appl., 35 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent

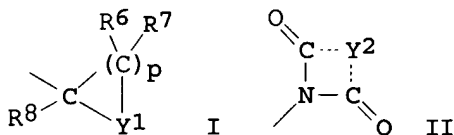
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 326132	A2	19890802	EP 1989-101348	1989 0126
EP 326132 R: DE, GB	A3	19910703		
JP 01191157	A2	19890801	JP 1988-14576	1988 0127
JP 2640109	B2	19970813		
US 5017448	A	19910521	US 1989-302300	1989 0127
PRIORITY APPLN. INFO.:			JP 1988-14576	A 1988 0127

GI



AB The title material comprises a conductive support having provided thereon ≥ 1 photoconductive layer containing ZnO and a resin binder which comprises ≥ 1 resin which contains ≥ 1 functional group capable of producing ≥ 1 CO₂H group through decomposition and is crosslinked at least in part. The functional group of the resin has the formula CO₂L where L = (CR₁R₂)_m(X)_nZ,

MR3R4R5, N = CHQ1, COQ2, NHOH, I, or II (R1, R2 = H or an aliphatic group; X = an aromatic group; Z = H, halogen, trihalomethyl, alkyl, CN, NO2, SO2R9 where R9 = a hydrocarbon group, CO2R10 where R10 = a hydrocarbon group, or OR11 where R11 = a hydrocarbon group; m, n = 0, 1, 2; R3, R4, R5 = a hydrocarbon group or OR12 where R12 = a hydrocarbon group; M = Si, Sn, or Ti; Q1, Q2 = a hydrocarbon group; Y1 = O or Si R6, R7, R8 = H, a hydrocarbon group, or OR13 where R13 = a hydrocarbon group; p = 3 or 4; Y2 = an organic residue to complete a cyclic imido group; the above-described hydrocarbon group means an aliphatic group including a chain, cyclic alkyl, alkenyl, or aralkyl or an aromatic group including Ph or naphthyl). The electrophotog. material reproduces images faithful to the original and provides a lithog. plate which does not generate background stains owing to strong affinity of the nonimage areas for water.

IT 124238-86-4

(electrophotog. material containing zinc oxide and, for lithog. plate preparation)

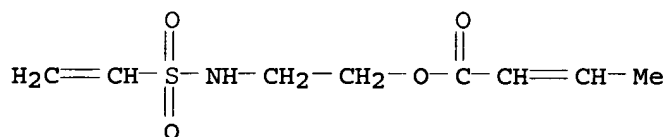
RN 124238-86-4 HCAPLUS

CN 2-Butenoic acid, 2-[(ethenylsulfonyl)amino]ethyl ester, polymer ethyl 2-methyl-2-propenoate and 7-(1H-imidazol-1-yl)-7-oxoheptyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 124238-85-3

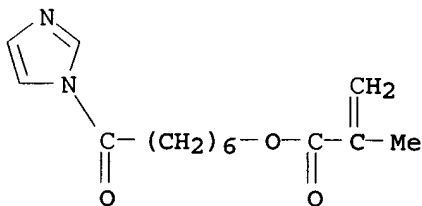
CMF C8 H13 N O4 S



CM 2

CRN 124238-84-2

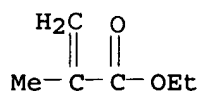
CMF C14 H20 N2 O3



CM 3

CRN 97-63-2

CMF C6 H10 O2



IC ICM G03G013-28
ICS G03G005-05
CC 74-6 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
IT 25719-55-5 124191-37-3 124221-59-6 124221-60-9 124221-61-0
124221-63-2 124221-65-4 124221-66-5 124221-68-7
124238-71-7 124238-73-9 124238-75-1 124238-77-3
124238-78-4 124238-80-8 124238-83-1 **124238-86-4**
124261-86-5 124261-87-6 124261-88-7
(electrophotog. material containing zinc oxide and, for lithog.
plate preparation)

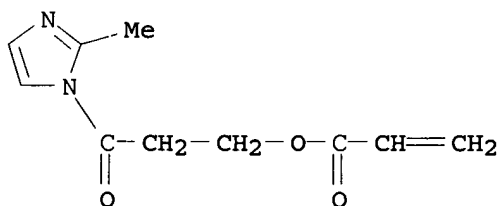
L21 ANSWER 20 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:125340 HCAPLUS
DOCUMENT NUMBER: 110:125340
TITLE: Electrophotographic lithographic printing
plate precursor
INVENTOR(S): Kato, Eiichi; Ishii, Kazuo
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 284748	A2	19881005	EP 1988-102036	1988 0211
EP 284748	A3	19900124		
EP 284748	B1	19931222		
R: DE, GB				
JP 63197964	A2	19880816	JP 1987-28345	1987 0212
JP 01070769	A2	19890316	JP 1987-226694	1987 0911
PRIORITY APPLN. INFO.:			JP 1987-28345	A 1987 0212
			JP 1987-226694	A 1987 0911

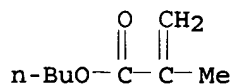
AB An electrophotog. lithog. printing plate precursor giving a
printing plate having excellent printing durability comprises a
conductive support with ≥ 1 photoconductive layer and an
outermost surface layer containing ≥ 1 resin having ≥ 1
functional group capable of forming a carboxyl group upon decomposition

The surface layer can be rendered highly hydrophilic while exhibiting water **resistance** when subjected to oil-desensitization processing after toner image formation. Thus, a composite electrophotog. plate with a charge-generating layer containing a bisazo pigment and a charge-transporting layer containing a hydrazone was overcoated with a Et methacrylate-tert-butyl dimethylsilyl methacrylate copolymer in PhMe, dried, exposed, and processed in an ELP-T automatic platemaking machine to give a plate capable of producing 10,000 prints with clear images and no fog in the nonimage areas.

IT 119359-98-7
(electrophotog. lithog. plate precursor with surface layer containing)
RN 119359-98-7 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, butyl ester, polymer with 3-(2-methyl-1H-imidazol-1-yl)-3-oxopropyl 2-propenoate (9CI) (CA INDEX NAME)
CM 1
CRN 119359-97-6
CMF C10 H12 N2 O3



CM 2
CRN 97-88-1
CMF C8 H14 O2



IC ICM G03G013-28
CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
IT 113880-92-5 119212-13-4 119212-15-6 119212-16-7
119212-18-9 119212-20-3 119359-80-7 119359-82-9
119359-84-1 119359-85-2 119359-87-4 119359-89-6
119359-96-5 119359-98-7 119360-00-8 119380-12-0
119380-14-2
(electrophotog. lithog. plate precursor with surface layer containing)

L21 ANSWER 21 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:216421 HCAPLUS
DOCUMENT NUMBER: 104:216421
TITLE: Photographic recording material for

INVENTOR(S): silver-dye-bleach process
 Tschopp, Paul
 PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
 SOURCE: Eur. Pat. Appl., 40 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 169813	A2	19860129	EP 1985-810334	1985 0722
EP 169813	A3	19890111		
EP 169813	B1	19920415		
R: BE, CH, DE, FR, GB, IT, LI, NL				
US 4661437	A	19870428	US 1985-757550	1985 0719
JP 61143753	A2	19860701	JP 1985-165033	1985 0727
US 4743683	A	19880510	US 1986-938986	1986 1203
PRIORITY APPLN. INFO.:			CH 1984-3659	A 1984 0727
			US 1985-757550	A3 1985 0719

GI For diagram(s), see printed CA Issue.

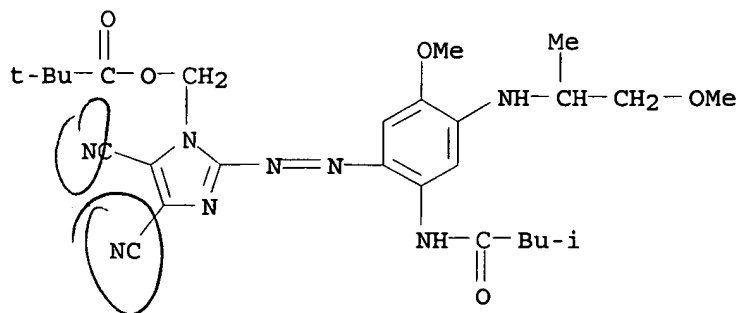
AB Ag-dye-bleach materials having good color reproduction and giving brilliant colors having outstanding lightfastness contain ≥ 1 oil-soluble azo dye (I; R = H, alkyl, alkoxy, Ph, alkylthio, CN, NO₂, or halogen; R₁ = H, alkyl, OH, or acylamino; R₂ = H or alkoxy; R₃ = H or an optionally substituted NH₂; A = a 5-membered ring containing $\geq N$; n = 0-3). Thus, an opaque triacetate support was coated with a gelatin-Ag(Br,I) emulsion, prepared by mixing 2.5 mL of a dispersion of II 13.2 mg, a 9:1 EtOAc-tricresyl phosphate mixture 2, 6% aqueous gelatin 6.6, distilled water 0.9, and 8% aqueous Na dibutyl naphthalenesulfonate 0.5 mL with water 5, gelatin-Ag(Br,I) emulsion 1.5, 4% aqueous gelatin 1, and a 1% hardener solution 1 mL, dried, step wedge-exposed, and processed to give a brilliant, lightfast, purple wedge which showed a d. decrease of 0% after a light exposure of 21 kJ/cm².

IT 102300-28-7P

(preparation and silver-dye-bleach color photog. applications of)

RN 102300-28-7 HCAPLUS

CN Propanoic acid, 2,2-dimethyl-, [4,5-dicyano-2-[[5-methoxy-4-[(2-methoxy-1-methylethyl)amino]-2-[(3-methyl-1-oxobutyl)amino]phenyl]azo]-1H-imidazol-1-yl]methyl ester (9CI)
 (CA INDEX NAME)



IC ICM G03C005-52
ICS C09B029-036

ICA C09B029-039

CC 74-2 (Radiation Chemistry, Photochemistry, and
Photographic and Other Reprographic Processes)
Section cross-reference(s): 41

IT 58104-38-4P 94960-34-6P 102300-27-6P 102300-28-7P
102300-29-8P 102300-30-1P 102300-31-2P 102300-32-3P
102300-33-4P 102300-34-5P 102300-35-6P 102300-36-7P
102300-37-8P 102300-38-9P 102300-39-0P 102300-40-3P
102300-41-4P 102300-42-5P 102300-43-6P 102300-44-7P
102300-45-8P 102300-46-9P 102300-47-0P 102300-48-1P
102300-49-2P 102300-50-5P 102300-51-6P 102300-52-7P
102300-53-8P 102300-54-9P 102300-55-0P 102300-56-1P
102300-57-2P 102300-58-3P 102300-59-4P 102300-60-7P
102300-61-8P 102300-62-9P 102300-63-0P 102300-64-1P
102300-65-2P 102300-66-3P 102300-67-4P 102300-68-5P
102300-69-6P 102300-70-9P 102300-71-0P 102300-72-1P
102300-73-2P 102300-74-3P 102325-59-7P

(preparation and silver-dye-bleach color photog. applications of)

L21 ANSWER 22 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1984:532449 HCAPLUS

DOCUMENT NUMBER: 101:132449

TITLE: Imidazolyl substituted addition polymers

AUTHOR(S): Wagner, H. M.; Leyshon, L. J.; Pich, J., Mrs.

CORPORATE SOURCE: Kodak Ltd., UK

SOURCE: Research Disclosure (1984), 243, 327-30 (No. 24315)

CODEN: RSDSBB; ISSN: 0374-4353

DOCUMENT TYPE: Journal; Patent

LANGUAGE: English

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RD 243015		19840710		

RD 243015

19840710

PRIORITY APPLN. INFO.:

19840710

RD 1984-243015

AB Polymers useful as mordants for photog. anionic image dyes comprise addnl. copolymers having an imidazolyl group attached directly or indirectly to the polymer backbone by one of its ring N and a proportion of the other ring N preferably being quaternized. Thus, a mixture of N-(methacryloyloxyethyl)imidazole 40, Me methacrylate 20, and AIBN 0.32 g in 300 mL EtOH was heated at 75° for 20 h to give a copolymer having log viscosity

(1% in 3:1 EtOH-Me₂CO at 25°) 22 mL/g. A mixture of 9.6 g above-prepared copolymer and 0.60 g PhCH₂Cl was heated at 80° for 18 h to give 5% quaternized copolymer having log viscosity 43 mL/g.

IT 92213-12-2DP, quaternized 92213-13-3DP, quaternized

(preparation of, for photog. dyes)

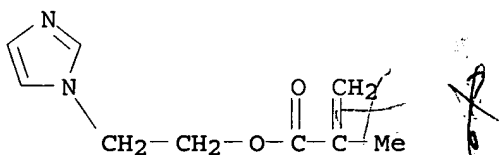
RN 92213-12-2 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(1H-imidazol-1-yl)ethyl ester, polymer with methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 62037-81-4

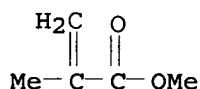
CMF C9 H12 N2 O2



CM 2

CRN 80-62-6

CMF C5 H8 O2



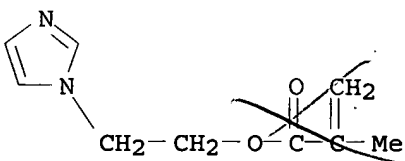
RN 92213-13-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, 2-(1H-imidazol-1-yl)ethyl ester, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 62037-81-4

CMF C9 H12 N2 O2



CC 41-11 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)

IT 61386-49-0DP, quaternized 92213-12-2DP, quaternized

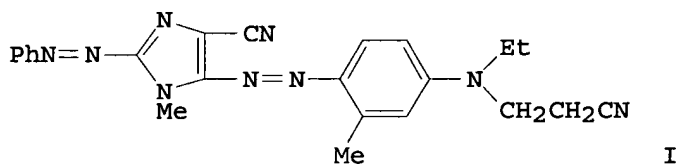
92213-13-3DP, quaternized

(preparation of, for photog. dyes)

L21 ANSWER 23 OF 23 HCAPLUS COPYRIGHT 2006 ACS on STN
 ACCESSION NUMBER: 1983:199822 HCAPLUS
 DOCUMENT NUMBER: 98:199822
 TITLE: Cyanoimidazole disazo disperse dyes
 PATENT ASSIGNEE(S): Mitsubishi Chemical Industries Co., Ltd.,
 Japan
 SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
 CODEN: JKXXAF
 DOCUMENT TYPE: Patent
 LANGUAGE: Japanese
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 57179248	A2	19821104	JP 1981-65057	1981 0428
PRIORITY APPLN. INFO.:			JP 1981-65057	1981 0428

GI



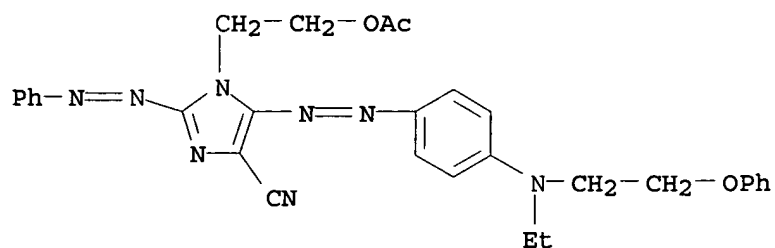
AB Cyanoimidazole disazo dyes were prepared and used for dyeing polyester fibers in fast red to navy blue shades. For example, aniline [62-53-3] was diazotized and coupled with 5-amino-4-cyanoimidazole [5098-11-3] to give 5-amino-4-cyano-2-(phenylazo)imidazole [85449-54-3] which was then diazotized, coupled with N-(2-cyanoethyl)-N-ethyl-m-toluidine [148-69-6], and methylated with di-Me sulfate [77-78-1] to give I [85449-55-4], red on polyester fiber.

IT **85449-02-1**

(dye, for polyester fibers, manufacture of)

RN 85449-02-1 HCAPLUS

CN 1H-Imidazole-4-carbonitrile, 1-[2-(acetyloxy)ethyl]-5-[[4-[ethyl(2-phenoxyethyl)amino]phenyl]azo]-2-(phenylazo)- (9CI) (CA INDEX NAME)



IC	C09B031-043; C09B043-11				
CC	41-3 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic Sensitizers)				
IT	85448-93-7	85448-94-8	85448-95-9	85448-96-0	85448-97-1
	85448-98-2	85448-99-3	85449-00-9	85449-01-0	
	85449-02-1	85449-03-2	85449-04-3	85449-05-4	
	85449-06-5	85449-07-6	85449-08-7	85449-09-8	85449-10-1
	85449-11-2	85449-12-3	85449-13-4	85449-14-5	85449-15-6
	85449-16-7	85449-17-8	85449-18-9	85449-19-0	85449-20-3
	85449-21-4	85449-22-5	85449-23-6	85449-24-7	85449-25-8
	85449-26-9	85449-27-0	85449-28-1	85449-29-2	85449-30-5
	85449-31-6	85449-32-7	85449-33-8	85449-34-9	85449-35-0
	85449-36-1	85449-37-2	85449-38-3	85449-39-4	85449-40-7
	85449-41-8	85449-42-9	85449-43-0	85449-44-1	85449-45-2
	85449-46-3	85449-47-4	85449-48-5	85449-49-6	85449-50-9
	85449-51-0	85449-52-1	85449-53-2	85449-55-4	85458-39-5
	(dye, for polyester fibers, manufacture of)				